



Material Safety Data Sheet

LN-901 HEAVY DUTY ADHESIVE

1. Product and company identification

Product name : LN-901 HEAVY DUTY ADHESIVE
Manufacturer : PPG Architectural Finishes, Inc.
15885 W. Sprague Road
Strongsville, OH 44136
Validation date : **2013-08-20.**
Print date : 2013-09-10.
Responsible name : Product Safety and Compliance
In case of emergency : 1-800-545-2643

2. Hazards identification

Emergency overview

Physical state : Liquid.

Signal word : DANGER!

Hazard statements EXTREMELY FLAMMABLE LIQUID AND VAPOR. HARMFUL IF SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER. NOTICE: This product contains solvents. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Precautionary measures : Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Keep container tightly closed. Use personal protective equipment as required. Wash thoroughly after handling.

Potential acute health effects

Inhalation : Irritating to respiratory system.

Ingestion : Toxic if swallowed.

Skin : Irritating to skin.

Eyes : Irritating to eyes.

Potential chronic health effects

Chronic effects : Contains material that may cause target organ damage, based on animal data. NOTICE: This product contains solvents. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogenicity : Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Target organs : Contains material which may cause damage to the following organs: kidneys, lungs, cardiovascular system, upper respiratory tract, skin, eyes, central nervous system (CNS), stomach, testes.

2. Hazards identification

Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:
irritation
redness
- Eyes** : Adverse symptoms may include the following:
pain or irritation
watering
redness

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	%
Kaolin	1332-58-7	10-<30
Limestone	1317-65-3	10-<30
cyclohexane	110-82-7	5-<10
Petroleum resins	64742-16-1	5-<10
heptane	142-82-5	1-<5
Benzene, ethenyl-, polymer with 1,3-butadiene	9003-55-8	1-<5
Quartz (SiO ₂)	14808-60-7	1-<5
titanium dioxide	13463-67-7	0.1-<1.0
cristobalite	14464-46-1	0.1-<1.0
Distillates (petroleum), light distillate hydrotreating process, low-boiling	68410-97-9	10-<30
ALKENES, ETHYLENE-MANUF.-BY-PRODUCT PIPERYLENE-CUT, POLYMERS WITH STEAM-CRACKED PETROLEUM DISTILLATES	68131-89-5	5-<10
Styrene butadiene polymer	26471-45-4	5-<10
Solvent naphtha (petroleum), light aliph.	64742-89-8	1-<5
rosin	8050-09-7	0.1-<1.0

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. If any product remains, gently rub with petroleum jelly, vegetable or mineral/baby oil then wash again with soap and water. Repeat as needed. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. Fire-fighting measures

- Flammability of the product** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse

7. Handling and storage

container. Keep out of the reach of children.

Storage

- : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Keep from freezing.

8. Exposure controls/personal protection

Ingredient	Exposure limits
Kaolin	<p>ACGIH TLV (United States, 1/2011). Notes: 1996 Adoption Refers to Appendix A -- Carcinogens. Respirable fraction; see Appendix C, paragraph C. TWA: 2 mg/m³ 8 hour(s). Form: Respirable fraction NIOSH REL (United States, 6/2009). TWA: 5 mg/m³ 10 hour(s). Form: Respirable fraction TWA: 10 mg/m³ 10 hour(s). Form: Total OSHA PEL (United States, 6/2010). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 10 mg/m³ 8 hour(s). Form: Total dust</p>
Limestone	<p>NIOSH REL (United States, 6/2009). TWA: 5 mg/m³ 10 hour(s). Form: Respirable fraction TWA: 10 mg/m³ 10 hour(s). Form: Total OSHA PEL (United States, 6/2010). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction TWA: 15 mg/m³ 8 hour(s). Form: Total dust</p>
cyclohexane	<p>ACGIH TLV (United States, 1/2011). TWA: 100 ppm 8 hour(s). NIOSH REL (United States, 6/2009). TWA: 1050 mg/m³ 10 hour(s). TWA: 300 ppm 10 hour(s). OSHA PEL (United States, 6/2010). TWA: 1050 mg/m³ 8 hour(s). TWA: 300 ppm 8 hour(s). OSHA PEL 1989 (United States, 3/1989). TWA: 1050 mg/m³ 8 hour(s). TWA: 300 ppm 8 hour(s).</p>
heptane	<p>ACGIH TLV (United States, 1/2011). STEL: 2050 mg/m³ 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 1640 mg/m³ 8 hour(s). TWA: 400 ppm 8 hour(s). NIOSH REL (United States, 6/2009). CEIL: 1800 mg/m³ 15 minute(s). CEIL: 440 ppm 15 minute(s). TWA: 350 mg/m³ 10 hour(s). TWA: 85 ppm 10 hour(s). OSHA PEL (United States, 6/2010). TWA: 2000 mg/m³ 8 hour(s). TWA: 500 ppm 8 hour(s). OSHA PEL 1989 (United States, 3/1989). STEL: 2000 mg/m³ 15 minute(s).</p>

8. Exposure controls/personal protection

Quartz (SiO ₂)	<p>STEL: 500 ppm 15 minute(s). TWA: 1600 mg/m³ 8 hour(s). TWA: 400 ppm 8 hour(s). OSHA PEL Z3 (United States, 9/2005). Notes: 10/(SiO₂+2) TWA: 10 mg/m³ 8 hour(s). Form: Respirable OSHA PEL Z3 (United States, 9/2005). Notes: 250/(%SiO₂+5) TWA: 250 mppcf 8 hour(s). Form: Respirable OSHA PEL 1989 (United States, 3/1989). Notes: as quartz TWA: 0.1 mg/m³, (as quartz) 8 hour(s). Form: Respirable dust ACGIH TLV (United States, 1/2011). Notes: Respirable fraction; see Appendix C, paragraph C. TWA: 0.025 mg/m³ 8 hour(s). Form: Respirable fraction OSHA PEL Z3 (United States, 9/2005). Notes: 30/(%SiO₂+2) TWA: 30 mg/m³ 8 hour(s). Form: Total dust. NIOSH REL (United States, 6/2009). Notes: See Appendix A - NIOSH Potential Occupational Carcinogen TWA: 0.05 mg/m³ 10 hour(s). Form: respirable dust</p>
titanium dioxide	<p>OSHA PEL (United States, 6/2010). TWA: 15 mg/m³ 8 hour(s). Form: Total dust OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m³ 8 hour(s). Form: Total dust ACGIH TLV (United States, 1/2011). Notes: Substance identified by other sources as a suspected or confirmed human carcinogen. 1996 Adoption Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL. Refers to Appendix A -- Carcinogens. TWA: 10 mg/m³ 8 hour(s).</p>
cristobalite	<p>OSHA PEL Z3 (United States, 9/2005). Notes: 1/2[10/(%SiO₂+2)] TWA: 10 mg/m³ 8 hour(s). Form: Respirable OSHA PEL Z3 (United States, 9/2005). Notes: 1/2[250/(%SiO₂+5)] TWA: 250 mppcf 8 hour(s). Form: Respirable OSHA PEL 1989 (United States, 3/1989). Notes: as quartz TWA: 0.05 mg/m³, (as quartz) 8 hour(s). Form: Respirable dust ACGIH TLV (United States, 1/2011). Notes: Respirable fraction; see Appendix C, paragraph C. TWA: 0.025 mg/m³ 8 hour(s). Form: Respirable fraction OSHA PEL Z3 (United States, 9/2005). Notes: 1/2[30/(%SiO₂+2)] TWA: 30 mg/m³ 8 hour(s). Form: Total dust. NIOSH REL (United States, 6/2009). TWA: 0.05 mg/m³ 10 hour(s). Form: respirable dust</p>

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

8. Exposure controls/personal protection

- Respiratory** : A NIOSH-approved, air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where air-purifying respirators may not provide adequate protection.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: -17°C (1.4°F)
- Auto-ignition temperature** : Not available.
- Flammable limits** : Not available.
- Color** : Not available.
- Odor** : not available
- pH** : Not available.
- Boiling/condensation point** : 81°C (177.8°F)
- Melting/freezing point** : Not available.
- Specific gravity** : 1.179
- Density (lbs/gal)** : 9.839
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Volatility** : Not available.
- Viscosity** : Dynamic: 10000 mPa·s (10000 cP)
Kinematic: 1951 cm²/s (195100 cSt)
- Dispersibility properties** : Not dispersible in the following materials: cold water.
- Solubility** : Insoluble in the following materials: cold water.

10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Incompatible materials** : Reactive or incompatible with the following materials:
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
cyclohexane	LD50 Oral	Rat	>5000 mg/kg	-
heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	103 g/m3	4 hours

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Benzene, ethenyl-, polymer with 1,3-butadiene	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Kaolin	A4	-	-	-	-	-
cyclohexane	-	-	-	None.	-	-
Benzene, ethenyl-, polymer with 1,3-butadiene	-	3	-	-	-	-
Quartz (SiO ₂)	A2	1	-	+	Proven.	-
titanium dioxide	A4	2B	-	+	-	-
crystalite	A2	1	-	+	Proven.	-

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
cyclohexane	Acute LC50 4530 to 5180 ug/L Fresh water	Fish - Pimephales promelas - 30 days - 20.5 mm - 0.119 g	96 hours
heptane	Acute LC50 375000 ug/L Fresh water	Fish - Oreochromis mossambicus - 99 mm - 10 g	96 hours
titanium dioxide	Acute EC50 5.83 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 5.5 ppm Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) - <24 hours	48 hours
	Acute LC50 >1000000 ug/L Marine	Fish - Fundulus heteroclitus	96 hours



12. Ecological information

water

Conclusion/Summary : Not available.**Persistence/degradability****Conclusion/Summary** : Not available.**13. Disposal considerations**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1133	ADHESIVES	3	II		Viscous substance exemption This class 3 material can be shipped as Packing Group III in packagings up to 30 L.
IMDG Class	UN1133	ADHESIVES	3	II		Viscous substance exemption This class 3 material can be shipped as Packing Group III in packagings up to 30 L.

PG* : Packing group

15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No components were found.
SARA 302/304 emergency planning and notification: No components were found.
SARA 302/304/311/312 hazardous chemicals: Kaolin; Limestone; cyclohexane; heptane; Benzene, ethenyl-, polymer with 1,3-butadiene; Quartz (SiO₂)
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
 Kaolin: Delayed (chronic) health hazard; Limestone: Immediate (acute) health hazard; cyclohexane: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; heptane: Fire hazard; Benzene, ethenyl-, polymer with 1,3-butadiene: Immediate (acute) health hazard; Quartz (SiO₂): Immediate (acute) health hazard, Delayed (chronic) health hazard

State regulations**Massachusetts**

: The following components are listed: CALCIUM CARBONATE; CYCLOHEXANE; HEPTANE (N-HEPTANE); SILICA, CRYSTALLINE, QUARTZ

New York

: The following components are listed: Benzene, hexahydro-

New Jersey: The following components are listed: KAOLIN; CALCIUM CARBONATE; LIMESTONE; CYCLOHEXANE; n-HEPTANE; HEPTANE; SILICA, QUARTZ; QUARTZ (SiO₂); TITANIUM DIOXIDE; TITANIUM OXIDE (TiO₂); SILICA, CRISTOBALITE; CRISTOBALITE (SiO₂)**Pennsylvania**: The following components are listed: KAOLIN; LIMESTONE; CYCLOHEXANE; HEPTANE; QUARTZ (SiO₂); TITANIUM OXIDE (TiO₂); CRISTOBALITE (SiO₂)**California Prop. 65**

15. Regulatory information

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

[International regulations](#)

Canada inventory : Not determined.

16. Other information

Hazardous Material Information System (U.S.A.) :

Health	*	2
Flammability		3
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

Prepared by : Product Stewardship, Regulatory Affairs & Labeling

[Notice to reader](#)

The information contained herein is based on data available at the time of preparation of this data sheet and which PPG Architectural Finishes, Inc. believes to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. PPG Architectural Finishes, Inc. shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and users of this material.

Complies with OSHA Hazard Communication Standard 29CFR1910.1200.