

## MATERIAL SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

**Manufacturer's name and address:**



ARDEX Engineered Cements  
400 Ardex Park Drive  
Aliquippa, PA  
15001

**Supplier's name and address:**

Refer to manufacturer

Information Telephone No.

: (724) 203-8499

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

**24 Hr. Emergency Tel #**

: CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)

**Product identifier**

: **ARDEX AF 207™ Adhesive**

**Chemical Name**

: N/Ap

**Chemical Family**

: Mixture.

**Chemical Formula**

: N/Ap

**Trade Name/Synonyms**

: ARDEX AF 207

**Molecular Weight**

: (N/Ap)

**Material Use**

: Adhesive for installation of Schlüter® DITRA over wood subfloors.

### 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 cause mild irritation to eyes and skin. May cause allergic respiratory reaction. May cause allergic skin reaction.

**HMIS Rating**

: \*-Chronic Hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe

*Health:* \*2

*Flammability:* 1

*Reactivity:* 0

### POTENTIAL HEALTH EFFECTS:

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

*Inhalation* : Inhalation of vapours or mist may cause irritation to the respiratory system.

*Skin* : May cause mild transient irritation. Prolonged contact may be more irritating.

*Eyes* : May cause mild transient irritation.

*Ingestion* : Ingestion of large amounts may cause stomach irritation.

#### 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.



ARDEX AF 207™ Adhesive  
MSDS Preparation Date (mm/dd/yyyy): 12/20/2012

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

| <b>Ingredients</b>                                        | <b>CAS #</b> | <b>Wt.%</b>   |
|-----------------------------------------------------------|--------------|---------------|
| Kaolin                                                    | 1332-58-7    | 15.00 - 40.00 |
| Distillates (petroleum), hydrotreated heavy naphthenic    | 64742-52-5   | 5.00 - 10.00  |
| Distillates (petroleum), solvent dewaxed heavy paraffinic | 64742-65-0   | 1.00 - 5.00   |
| Urea                                                      | 57-13-6      | 1.00 - 5.00   |
| Rosin                                                     | 8050-09-7    | 0.50 - 1.50   |
| Crystalline silica, quartz                                | 14808-60-7   | 0.10 - 0.50   |

Note: This product does NOT contain asbestos.

### SECTION 4 - FIRST AID MEASURES

|                            |                                                                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>          | : If inhaled, move to fresh air. If irritation persists, seek prompt medical attention.                                               |
| <b>Skin contact</b>        | : Remove contaminated clothing. Wash off with soap and plenty of water. If irritation persists, seek prompt medical attention.        |
| <b>Eye contact</b>         | : Flush with plenty of water. If irritation persists, seek prompt medical attention.                                                  |
| <b>Ingestion</b>           | : Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Consult a physician if symptoms develop and persist. |
| <b>Notes For Physician</b> | : Treat symptomatically.                                                                                                              |

### SECTION 5 - FIRE FIGHTING MEASURES

#### Fire hazards/conditions of flammability

- : Not flammable under normal conditions of use. However, may ignite if exposed to extreme heat and flame. 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

- : Carbon dioxide (CO<sub>2</sub>); Dry chemical; Water fog; Foam .

#### 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.

#### Hazardous combustion products

- : Carbon monoxide, carbon dioxide and other toxic vapors and gases, that are common to thermal degradation of organic compounds.

#### NFPA Rating

- |                  |                        |                       |                           |             |
|------------------|------------------------|-----------------------|---------------------------|-------------|
| 0 - Minimal      | 1 - Slight             | 2 - Moderate          | 3 - Serious               | 4 - Severe  |
| <i>Health: 2</i> | <i>Flammability: 1</i> | <i>Instability: 0</i> | <i>Special Hazards: 0</i> | <i>None</i> |

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

|                                  |                                                                                                                                    |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>      | : Restrict access to area until completion of clean-up. Wear suitable protective equipment. For personal protection see Section 8. |
| <b>Environmental precautions</b> | : Do not allow product to enter waterways. Do not allow material to contaminate ground water system.                               |



ARDEX AF 207™ Adhesive  
 MSDS Preparation Date (mm/dd/yyyy): 12/20/2012

**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. Residual of product, while still wet, can be cleaned up with warm soapy water. Refer to Section 13 for disposal of contaminated material. 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: 1-800-424-8802).  
 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 sensitization 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 vapors, fumes or dust. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Keep away from oxidizing materials. Avoid and control operations which create high vapor or dust concentrations. 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. Recommended storage temperature: < 32.2°C (90°F).

**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**

| <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> |
| 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        |
| Distillates (petroleum), hydrotreated heavy naphthenic    | 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 dewaxed heavy paraffinic | 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        |
| Urea                                                      | 10 mg/m <sup>3</sup> (AIHA WEEL)             | N/Av                                          | N/Av                                                                            | N/Av        |
| Rosin                                                     | N/Av                                         | N/Av                                          | N/Av                                                                            | 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        |



ARDEX AF 207™ Adhesive  
MSDS Preparation Date (mm/dd/yyyy): 12/20/2012

#### Ventilation and engineering measures

: Use with adequate ventilation. Provide adequate cross air circulation. 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

: Where contact is likely, impervious gloves are recommended. Advice should be sought from glove suppliers.

#### Eye / face protection

: Safety glasses with side shields should be used with this product.

#### 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 vapor or dust. 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>                    | : dispersible          |
| <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>     | : 4 g/L SCAQMD 1168     | <b>Volatiles (% by weight)</b>                | : 28 – 31 %            |
| <b>Flash point</b>                            | : (> 93.3°C (> 200 °F)) |                                               |                        |
| <b>Flash point Method</b>                     | : Setaflash Closed Cup  | <b>Auto-ignition temperature</b>              | : N/Av                 |
| <b>Lower flammable limit (% by vol.)</b>      | : N/Av                  | <b>Upper flammable limit (% by vol.)</b>      | : N/Av                 |
| <b>Flame Projection Length</b>                | : N/Av                  | <b>Flashback observed</b>                     | : N/Av                 |
| <b>Viscosity</b>                              | : 100,000 cSt           |                                               |                        |
| <b>Absolute pressure of container</b>         | : N/Av                  |                                               |                        |

### Section 10: STABILITY AND REACTIVITY DATA

|                                               |                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------|
| <b>Stability and reactivity</b>               | : Stable under the recommended storage and handling conditions prescribed. |
| <b>Hazardous polymerization</b>               | : Hazardous polymerization does not occur.                                 |
| <b>Conditions to avoid</b>                    | : Extreme heat.                                                            |
| <b>Materials To Avoid And Incompatibility</b> | : Oxidizing agents.                                                        |
| <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. |



ARDEX AF 207™ Adhesive  
MSDS Preparation Date (mm/dd/yyyy): 12/20/2012

| <u>Ingredients</u>                                        | <u>LC<sub>50</sub>(4hr)</u><br><u>inh, rat</u> | <u>LD<sub>50</sub></u> |                         |
|-----------------------------------------------------------|------------------------------------------------|------------------------|-------------------------|
|                                                           |                                                | <u>(Oral, rat)</u>     | <u>(Rabbit, dermal)</u> |
| Kaolin                                                    | N/Av                                           | N/Av                   | N/Av                    |
| Distillates (petroleum), hydrotreated heavy naphthenic    | N/Av                                           | > 5000 mg/kg           | N/Av                    |
| Distillates (petroleum), solvent dewaxed heavy paraffinic | N/Av                                           | N/Av                   | N/Av                    |
| Urea                                                      | N/Av                                           | 8471 mg/kg             | > 21,000 mg/kg          |
| Rosin                                                     | N/Av                                           | N/Av                   | N/Av                    |
| 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** : None known.

## 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.



ARDEX AF 207™ Adhesive  
MSDS Preparation Date (mm/dd/yyyy): 12/20/2012

#### SECTION 14: TRANSPORT 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

##### 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. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

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.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Kaolin dust (MA, MN, NJ, PA, RI); Urea (MN); Rosin (MN); Crystalline silica, quartz (MA, MN, NJ, PA, RI).

##### International 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.**

#### 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



ARDEX AF 207™ Adhesive  
MSDS Preparation Date (mm/dd/yyyy): 12/20/2012

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  
RTECS: Registry of Toxic Effects of Chemical Substances  
SARA: Superfund Amendments and Reauthorization Act  
SCAQMD: South Coast Air Quality Management District  
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 and Biological Exposure Indices for 2012.
- 2. International Agency for Research on Cancer Monographs, searched 2012.
- 3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2012 (Chempendium and RTECs).
- 4. Material Safety Data Sheet from manufacturer.
- 5. US EPA Title III List of Lists - July 2012 version.
- 6. California Proposition 65 List – November 02, 2012.

**Prepared by:**

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

Please direct all enquiries to ARDEX Engineered Cements.

**DISCLAIMER OF LIABILITY**

This Material Safety Data Sheet was prepared by ARDEX Engineered Cements using information from ingredient MSDSs and CCOHS' Web Information Service. The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ARDEX Engineered Cements expressly disclaims all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

This Material Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ARDEX Engineered Cements.

**Preparation Date (mm/dd/yyyy):** 12/22/2012

**END OF DOCUMENT**