SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer’s name and address: ARDEX Engineered Cements
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Information Telephone No. : (888) 512-7339 or (724) 203-5000
Website Address : http://www.ardexamericas.com
24 Hr Emergency Telephone # : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)
Product Identifier : ARDEX FLEX CAULK™
Product ID No. : 16730821
Trade Name/Synonyms : FLEX Caulk
Material Use : Siliconized Acrylic Color Caulk
Uses Advised Against : No information available.

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)
- Skin corrosion/irritation; Category 2
- Serious eye damage/eye irritation; Category 2A
- Specific target organ toxicity, single exposure; Narcotic effects; Category 3
- Specific target organ toxicity, single exposure; Respiratory effects; Category 3
- Specific target organ toxicity, repeated exposure; Category 2

GHS Pictograms
- Hazard Statement
Causes serious eye irritation.
Causes skin irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs <lungs> through prolonged or repeated exposure.

Precautionary Statements
Do not breathe dust/vapours. Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection. Wash hands and exposed skin thoroughly after handling. Take off contaminated clothing.
Protect from sunlight. Do not subject to grinding. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with federal, state, and local laws. Do not allow product to enter drains.

Hazards Not Otherwise Classified
% With Unknown Acute Toxicity: 45% by weight of this product is comprised of ingredients with unknown acute toxicity.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>% (by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), medium aliphatic</td>
<td>64742-88-7</td>
<td>0.1 – 1.0</td>
</tr>
</tbody>
</table>

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

### SECTION 4 – FIRST AID MEASURES

**General**: Call a Poison Center or doctor if you feel unwell.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: call a doctor/physician.

**Skin contact**: Remove/Take off immediately all contaminated clothing. Flush affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate medical attention/advice.

**Eye contact**: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

**Ingestion**: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

**Notes for Physician**: Treat symptomatically.

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

**Inhalation**: May cause minor, temporary irritation to respiratory tract. Symptoms may include coughing and shortness of breath. Inhalation of large amounts of vapor may cause central nervous system depression (dizziness, incoordination, nausea, headache, vomiting, or unconsciousness). Intentionally inhaling concentrated vapors can cause rapid heart beats, which can cause death.

**Skin**: May cause skin irritation. Symptoms may include redness and itching.

**Eyes**: Causes irritation to eyes. Symptoms may include redness, itching, blurred vision or pain.

**Ingestion**: Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur. Ingestion of large amounts may cause central nervous system depression.

**Effects of long-term (chronic) exposure**

: Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Long-term exposure may damage the following: kidneys, lungs, liver, heart, central nervous system (CNS), eye, thyroid, and pituitary gland.

**Indication of need for immediate medical attention or special treatment**

: Difficulty breathing persists after removing the person to fresh air.

: Any exposure to the eye which causes irritation.

: Ingestion, especially if vomiting occurs afterward.

### SECTION 5 – FIRE FIGHTING MEASURES

**Suitable extinguishing media**: Carbon dioxide, dry chemical powder, appropriate foam or water fog.

**Unsuitable extinguishing media**: Water jet

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

**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.

**Environmental precautions**
- Do not allow material to enter drains or contaminate ground water system.

**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, WHMIS 2015)**
- Not flammable

---

**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.

**Protective equipment**
- Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

**Emergency 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). Outside of the U.S. call the emergency number listed in Section 1.
- US CERCLA Reportable quantity (RQ): None.

**Methods and materials for containment and cleaning up**
- Ventilate area of release. Eliminate sources of ignition. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.

**Prohibited materials**
- Avoid strong oxidizing agents

**Environmental precautions**
- Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.

**Reference to other sections**
- See Section 13 for disposal information.

---

**SECTION 7 – HANDLING AND STORAGE**

**Safe handling procedures**
- Observe good hygiene standards. Use only with adequate ventilation. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Avoid repeated or prolonged skin contact. Do not breathe vapors or mists of this product. Sanding and grinding dusts may be harmful if inhaled. When removing this product from existing flooring (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep container tightly closed.

**Storage requirements**
- Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

**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**

**Permissible Exposure Limits**
- No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.
ARDEX FLEX CAULK™
24-Aug-2016

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>ACGIH TLV TWA</th>
<th>STEL</th>
<th>OSHA PEL PEL</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>10 mg/m³</td>
<td>N/Av</td>
<td>15 mg/m³</td>
<td>N/Av</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), medium aliphatic</td>
<td>64742-88-7</td>
<td>100 ppm</td>
<td>N/Av</td>
<td>100 ppm</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

**Engineering Controls**
Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor generated from the handling of this product.

**Personal Protection Equipment**

**Eye / face protection**
Chemical goggles must be worn when using this product.

**Skin protection**
Wear chemical resistant protective clothing and impervious gloves. Materials such as nitrile rubber and Viton (fluorocarbon rubber) are recommended. Consult the glove manufacturer’s results for breakthrough time for their gloves with the ingredients listed above.

**Body protection**
Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

**Respiratory protection**
If work process generates excessive quantities of vapor, or exposures in excess of any PEL, wear an appropriate organic vapor respirator. For exposure to dust, wear a N-95 or better NIOSH approved dust mask.

**Site safety equipment**
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. Do not breathe vapors/dust. Clean all equipment and clothing at end of each work shift.

---

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Paste</th>
<th>Appearance</th>
<th>Off-white paste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Slight ammonia</td>
<td>Odor threshold</td>
<td>N/Av</td>
</tr>
<tr>
<td>pH</td>
<td>N/Av</td>
<td>Specific gravity</td>
<td>1.42</td>
</tr>
<tr>
<td>Boiling point</td>
<td>N/Av</td>
<td>Coefficient of water/oil distribution</td>
<td>N/Av</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>N/Av</td>
<td>Solubility in water</td>
<td>Dispersible</td>
</tr>
<tr>
<td>Vapor pressure (mm Hg @ 20°C / 68°F)</td>
<td>N/Av</td>
<td>Evaporation rate (n-Butyl acetate = 1)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Vapor density (Air = 1)</td>
<td>&gt; 1</td>
<td>Volatiles (% by weight)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOCs)</td>
<td>25 g/L SCAQMD Rule 1168</td>
<td>Flammability classification</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Particle size</td>
<td>N/Av</td>
<td>Flammability classification</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;200°F (93.3°C)</td>
<td>Lower flammable limit (% by vol)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point method</td>
<td>Setaflash closed</td>
<td>Upper flammable limit (% by vol)</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>N/Av</td>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
<td>Oxidizing properties</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Explosion data:** Sensitivity to mechanical impact / static discharge
Not expected to be sensitive to mechanical impact or static discharge.

---

**SECTION 10 – REACTIVITY AND STABILITY INFORMATION**

**Reactivity**
Does not react.

**Stability**
Stable under the recommended storage and handling conditions prescribed.

**Hazardous reactions**
Hazardous polymerization does not occur.

**Conditions to avoid**
High temperatures.

**Materials to avoid and incompatibility**
Oxidizing agents.

**Hazardous decomposition products**
None known, refer to hazardous combustion products in Section 5.
**SECTION 11 – TOXICOLOGICAL INFORMATION**

**Routes of exposure**: Inhalation: YES  
**Skin Absorption**: YES  
**Skin and Eyes**: Yes  
**Ingestion**: YES

**Symptoms of exposure**: See Section 4.

**Toxicological data**

**Calculated Acute Toxicity Estimates (ATEs) for the Product**

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Oral</th>
<th>Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

**Toxicological data**: See below for individual ingredient acute toxicity data.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>LC50 (4 hr), mg/L</th>
<th>LD50, mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&gt; 6.82</td>
<td>&gt; 20,000</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), medium aliphatic</td>
<td>64742-88-7</td>
<td>14</td>
<td>&gt; 6500</td>
</tr>
</tbody>
</table>

**Skin corrosion or irritation**: May cause irritation to skin.

**Serious eye damage / eye irritation**: May cause irritation to eyes.

**Respiratory or skin sensitization**: None known.

**Germ cell mutagenicity**: None known.

**Carcinogenic status**: This product does not contain any material shown to be a carcinogen by IARC, NTP, or OSHA.

**Reproductive toxicity**: None known.

**Specific Target Organ Toxicity, Single Exposure**: Exposure to very high concentrations of vapor or ingestion of large amounts may cause Central Nervous System effects.

**Specific Target Organ Toxicity, Repeated Exposure**: Exposure to Solvent Naphtha (petroleum) medium aliphatic has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans.

**Aspiration hazard**: This product contains materials which, in their pure state, present an aspiration hazard. However, this product’s viscosity is above the range where aspiration is likely. Although aspiration is unlikely, do not induce vomiting in a person who has ingested this material. Consult a doctor if the person has vomited after ingesting this product.

**Additional information**: N/Av

**SECTION 12 – ECOLOGICAL INFORMATION**

**Environmental effects**: The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

- Ecotoxicity: No data available.
- Biodegradability: No data available.
- Bioaccumulative potential: No data available.
- Mobility in soil: No data available.
- PBT and vPvB assessment: No data available.
- Other adverse effects: No data available.

**SECTION 13 – DISPOSAL CONSIDERATION**

**Handling for disposal**: Handle waste according to recommendations in Section 7.

**Methods of disposal**: You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations.
Contact your local, state, provincial or federal environmental agency for specific rules.

**Packaging**  
Handle contaminated packaging in the same manner as the product.

**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

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>Shipping Name</th>
<th>Class</th>
<th>Packing Group</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>None</td>
<td>This product is not regulated according to Canadian TDG regulations.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>TDG Additional Information</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49 CFR/DOT</td>
<td>None</td>
<td>This product is not regulated according to US DOT regulations.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>49 CFR/DOT Additional Information</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IATA**: Not regulated for Air Transport

**IMDG**: Not regulated for Ocean Transport

### SECTION 15 – REGULATORY INFORMATION

**Canadian Information**:  
This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL).

**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.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:
- Immediate (Acute) Health Hazard
- 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 or 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.

**U.S. State Right To Know Laws**
California Proposition 65: To the best of our information, this product does not contain chemicals known to the State of California to cause cancer and/or reproductive harm.

**Other State Right to Know Laws**:
<table>
<thead>
<tr>
<th>Ingredient on State RTK Law?</th>
<th>CAS #</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>NY</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), medium aliphatic</td>
<td>64742-88-7</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**SECTION 16 – OTHER INFORMATION**

**HMIS Rating**: * - Chronic Hazard  0 - Minimal  1 – Slight  2 – Moderate  3 – Serious  4 – Severe  
Health: 2  Flammability 1  Physical Hazard 0  
Recommended PPE: Gloves, safety glasses

**Legend**

ACGIH: American Conference of Governmental Industrial Hygienists  
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  
GHS: Globally Harmonized System  
HPR: Hazardous Products Regulations  
IARC: International Agency for Research on Cancer  
Inh: Inhalation  
N/Av: Not Available  
N/Ap: Not Applicable  
NIOSH: National Institute of Occupational Safety and Health  
OSHA: Occupational Safety and Health Administration  
NTP: National Toxicology Program  
PEL: Permissible exposure limit  
RCRA: Resource Conservation and Recovery Act  
SARA: Superfund Amendments and Reauthorization Act  
STEL: Short Term Exposure Limit  
TDG: Canadian Transportation of Dangerous Goods Act & Regulations  
TLV: Threshold Limit Values  
TSCA: Toxic Substance Control Act  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Identification System

**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. ARDEX Engineered Cements 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.

**Prepared By:**

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

(724) 203-5000  
Visit our Website: http://www.ardexamericas.com

**Revision date:** 24-Aug-2016

End of Document