




## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	• AluminaLiner®
<b>Trade Name</b>	• AluminaLiner®
<b>Company</b>	• Quadex LLC, 564 W. 9320 S., Sandy, UT 84070
<b>Company Contact</b>	• Matthew Peterson
<b>Company Phone</b>	• 844-782-4832
<b>Emergency</b>	• Domestic Shipments and to Canada: 1-800-633-8253 • International Shipments: 1-801-629-0667

## 2. HAZARDS IDENTIFICATION

<b>Emergency Overview: OSHA Hazards</b>	• This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).						
<b>GHS Classification</b>	<table border="0"> <tr> <td><i>Skin Irritation</i></td> <td>• Category 2</td> </tr> <tr> <td><i>Serious Eye Damage</i></td> <td>• Category 1</td> </tr> <tr> <td><i>Specific Target Organ Toxicity: Single Exposure</i></td> <td>• Category 3</td> </tr> </table>	<i>Skin Irritation</i>	• Category 2	<i>Serious Eye Damage</i>	• Category 1	<i>Specific Target Organ Toxicity: Single Exposure</i>	• Category 3
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<i>Serious Eye Damage</i>	• Category 1						
<i>Specific Target Organ Toxicity: Single Exposure</i>	• Category 3						
<b>GHS Label elements, including precautionary statements</b>	 <p><i>Pictogram</i></p>						
<i>Signal Word</i>	• Danger						
<i>Hazard Statement(s)</i>	<table border="0"> <tr> <td><i>H315</i></td> <td>• Causes skin irritation.</td> </tr> <tr> <td><i>H318</i></td> <td>• Causes serious eye damage.</td> </tr> <tr> <td><i>H335</i></td> <td>• May cause respiratory irritation.</td> </tr> </table>	<i>H315</i>	• Causes skin irritation.	<i>H318</i>	• Causes serious eye damage.	<i>H335</i>	• May cause respiratory irritation.
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<i>H335</i>	• May cause respiratory irritation.						
<i>Precautionary Statement(s)</i>	<table border="0"> <tr> <td><i>P261</i></td> <td>• Avoid breathing dust/fume/gas/mist/vapours/spray.</td> </tr> <tr> <td><i>P280</i></td> <td>• Wear protective gloves/eye protection/face protection.</td> </tr> <tr> <td><i>P305 + P351 + P338</i></td> <td>• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td> </tr> </table>	<i>P261</i>	• Avoid breathing dust/fume/gas/mist/vapours/spray.	<i>P280</i>	• Wear protective gloves/eye protection/face protection.	<i>P305 + P351 + P338</i>	• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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## 2. HAZARDS IDENTIFICATION (CONTINUED)

HMIS Classification	Health hazard	• 3
	Flammability	• 0
	Physical hazards	• 0
NFPA Rating	Health hazard: Fire	• 3
	Reactivity Hazard	• 0
Potential Health Effects	Inhalation	• May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
	Skin	• May be harmful if absorbed through skin. Causes skin burns.
	Eyes	• Causes eye burns.
	Ingestion	• May be harmful if swallowed.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	Cas #	Percent
Calcium Aluminate	• 65997-16-2	• 40-100
Admixtures		• 1-15
Monocrystalline Quartz	• 14808-60-7	• 40-70
Polypropylene	• 9003-07	• 0-5

## 4. FIRST AID MEASURE

<b>First Aid Procedures</b>	<p><i>Notes to physician: Symptoms may be delayed.</i></p> <p><i>General advice: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.</i></p>
Eye Contact	<ul style="list-style-type: none"> <li>• Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Seek medical attention immediately.</li> </ul>
Skin Contact	<ul style="list-style-type: none"> <li>• Contact Wash off with plenty of soap and water. Get medical attention if irritation develops and persists.</li> </ul>
Inhalation	<ul style="list-style-type: none"> <li>• If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.</li> </ul>
Ingestion	<ul style="list-style-type: none"> <li>• Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If ingestion of a large amount does occur, call a poison control center immediately.</li> </ul>

## 5. FIRE FIGHTING MEASURES

<i>Flammable Properties</i>	<ul style="list-style-type: none"> <li>The product is not flammable. No unusual fire or explosion hazards noted.</li> </ul>
<i>Suitable Extinguishing Media</i>	<ul style="list-style-type: none"> <li>Dry chemical, CO<sub>2</sub>, or water spray, Alcohol foam. In the event of fire, use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.</li> </ul>
<i>Specific Methods</i>	<ul style="list-style-type: none"> <li>None available.</li> </ul>

## 6. ACCIDENTAL RELEASE MEASURES

<i>Personal Precautions</i>	<ul style="list-style-type: none"> <li>Keep unnecessary personnel away. Keep upwind.</li> </ul>
<i>Environmental Precautions</i>	<ul style="list-style-type: none"> <li>Do not flush into surface water or sanitary sewer system.</li> </ul>
<i>Methods for Containment</i>	<ul style="list-style-type: none"> <li>Stop the flow of material, if this is without risk. Dike the spilled material.</li> </ul>
<i>Methods for Cleaning Up</i>	<ul style="list-style-type: none"> <li>Shovel into labeled waste container for reuse or disposal. Wear adequate protective equipment. Area may be washed down with water.</li> </ul>

## 7. HANDLING AND STORAGE

<i>Handling</i>	<ul style="list-style-type: none"> <li>Do not get this material in contact with eyes. Avoid contact with skin. Do not empty into drains.</li> </ul>
<i>Storage</i>	<ul style="list-style-type: none"> <li>Store in dry place and keep sealed until ready to use.</li> </ul>

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Occupational Exposure Limits: US. ACGIH Threshold Limit Values</b>	Type	Value
<i>Calcium Aluminate</i>	<ul style="list-style-type: none"> <li>TWA</li> </ul>	<ul style="list-style-type: none"> <li>10 mg/m<sup>3</sup></li> </ul>
<i>Admixtures</i>	<ul style="list-style-type: none"> <li>TWA</li> </ul>	<ul style="list-style-type: none"> <li>10 mg/m<sup>3</sup></li> </ul>
<i>Monocrystalline</i>	<ul style="list-style-type: none"> <li>TWA</li> </ul>	<ul style="list-style-type: none"> <li>10 mg/m<sup>3</sup></li> </ul>
<i>Polypropylene</i>	<ul style="list-style-type: none"> <li>TWA</li> </ul>	<ul style="list-style-type: none"> <li>10 mg/m<sup>3</sup></li> </ul>
<b>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</b>	Type	Value
N/A		
<b>US. OSHA Table Z-3 (29 CFR 1910.1000)</b>	Type	Value
N/A		
<i>Engineering Controls</i>	<ul style="list-style-type: none"> <li>Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.</li> </ul>	

### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION (CONTINUED)

Personal Protective Equipment	
<i>Eye / Face Protection</i>	<ul style="list-style-type: none"> <li>Do not get in eyes. Chemical goggles are recommended.</li> </ul>
<i>Skin Protection</i>	<ul style="list-style-type: none"> <li>Avoid contact with the skin. Wear protective gloves. Wear suitable protective clothing as protection against splashing or contamination.</li> </ul>
<i>Respiratory Protection</i>	<ul style="list-style-type: none"> <li>When workers are facing concentrations above the exposure limit they must use NIOSH/MESHA respirators.</li> </ul>
<i>General Hygiene Considerations</i>	<ul style="list-style-type: none"> <li>Do not get in eyes. Avoid contact with skin.</li> </ul>

### 9. PHYSICAL & CHEMICAL PROPERTIES

<i>Appearance</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Physical State</i>	<ul style="list-style-type: none"> <li>Powder</li> </ul>
<i>Form Viscous</i>	<ul style="list-style-type: none"> <li>Powder</li> </ul>
<i>Color</i>	<ul style="list-style-type: none"> <li>Grey</li> </ul>
<i>Odor</i>	<ul style="list-style-type: none"> <li>Odorless</li> </ul>
<i>Odor Threshold</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>pH</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Vapor Pressure</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Vapor Density</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Boiling Point</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Melting Point/ Freezing Point</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Solubility (Water)</i>	<ul style="list-style-type: none"> <li>Slight (0.01 – 1.0%)</li> </ul>
<i>Specific Gravity</i>	<ul style="list-style-type: none"> <li>3.15</li> </ul>
<i>Relative Density</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Flash Point</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Flammability limits in air upper, % by volume</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Flammability limits in air lower, % by volume</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<i>Auto-Ignition Temperature</i>	
<i>Other Data</i>	

### 10. CHEMICAL STABILITY & REACTIVITY INFORMATION

<i>Chemical Stability</i>	<ul style="list-style-type: none"> <li>Stable under normal conditions.</li> </ul>
<i>Conditions to Avoid</i>	<ul style="list-style-type: none"> <li>Although no hazardous reactions will occur, product should be kept dry.</li> </ul>
<i>Incompatible Materials</i>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>

**10. CHEMICAL STABILITY & REACTIVITY INFORMATION (CONTINUED)**

<i>Hazardous Decomposition Products</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>
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**11. TOXICOLOGICAL INFORMATION**

<b>Toxicological Data</b>	
<i>Components</i>	<ul style="list-style-type: none"> <li>• Test Results / None</li> </ul>
<i>Local Effects</i>	<ul style="list-style-type: none"> <li>• Irritating to skin. Contact may irritate or burn eyes.</li> </ul>
<i>Chronic Effects</i>	<ul style="list-style-type: none"> <li>• Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.</li> </ul>
<i>Carcinogenicity</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>

**12. ECOLOGICAL INFORMATION**

<b>Toxicological Data</b>	
<i>Components</i>	<ul style="list-style-type: none"> <li>• Test Results / None</li> </ul>
<i>Ecotoxicity</i>	<ul style="list-style-type: none"> <li>• Not available.</li> </ul>
<i>Environmental Effects</i>	<ul style="list-style-type: none"> <li>• An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.</li> </ul>
<i>Aquatic Toxicity</i>	<ul style="list-style-type: none"> <li>• No data available for this product.</li> </ul>
<i>Persistence and Degradability</i>	<ul style="list-style-type: none"> <li>• Not available.</li> </ul>

**13. DISPOSAL CONSIDERATIONS**

<i>Disposal Instructions</i>	<ul style="list-style-type: none"> <li>• Dispose in sanitary land fill in accordance with federal, state, and local regulations.</li> </ul>
<i>Waste from Residues / Unused Products</i>	<ul style="list-style-type: none"> <li>• Not applicable unused products.</li> </ul>

**14. TRANSPORT INFORMATION**

<i>DOT</i>	<ul style="list-style-type: none"> <li>• Not regulated as dangerous goods.</li> </ul>
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**15. REGULATORY INFORMATION**

<i>US Federal Regulations</i>	<ul style="list-style-type: none"> <li>• This product is a non "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. CERCLA/SARA Hazardous Substances - Not applicable.</li> </ul>
<i>Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))</i>	<ul style="list-style-type: none"> <li>• Not regulated.</li> </ul>
<i>DEA Essential Chemical Code Number</i>	<ul style="list-style-type: none"> <li>• Not regulated.</li> </ul>

**15. REGULATORY INFORMATION (CONTINUED)**

<i>Drug Enforcement Administration (DEA). List 1 &amp; 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))</i>	<ul style="list-style-type: none"> <li>• Not regulated.</li> </ul>
<i>DEA Exempt Chemical Mixtures Code Number</i>	<ul style="list-style-type: none"> <li>• Not regulated.</li> </ul>
<i>CERCLA (Superfund) Reportable Qty</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard Categories</b>	
<i>Immediate Hazard</i>	<ul style="list-style-type: none"> <li>• No</li> </ul>
<i>Delayed Hazard</i>	<ul style="list-style-type: none"> <li>• No</li> </ul>
<i>Fire Hazard</i>	<ul style="list-style-type: none"> <li>• No</li> </ul>
<i>Pressure Hazard</i>	<ul style="list-style-type: none"> <li>• No</li> </ul>
<i>Reactivity Hazard</i>	<ul style="list-style-type: none"> <li>• No</li> </ul>
<i>Section 302 Extremely Hazardous Substance</i>	<ul style="list-style-type: none"> <li>• No</li> </ul>
<i>Section 311 Hazardous Chemical</i>	<ul style="list-style-type: none"> <li>• No</li> </ul>

**16. OTHER INFORMATION**

<i>Further Information</i>	<ul style="list-style-type: none"> <li>• HMIS® is a registered trade and service mark of the NPCA.</li> </ul>
<b>HMIS® Ratings</b>	
<i>Health</i>	<ul style="list-style-type: none"> <li>• 2</li> </ul>
<i>Flammability</i>	<ul style="list-style-type: none"> <li>• 0</li> </ul>
<i>Physical hazard</i>	<ul style="list-style-type: none"> <li>• 0</li> </ul>
<b>NFPA Ratings</b>	
<i>Health</i>	<ul style="list-style-type: none"> <li>• 2</li> </ul>
<i>Flammability</i>	<ul style="list-style-type: none"> <li>• 0</li> </ul>
<i>Instability</i>	<ul style="list-style-type: none"> <li>• 0</li> </ul>
<i>Disclaimer</i>	<ul style="list-style-type: none"> <li>• The information provided in this Safety Data Sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification, The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.</li> </ul>
<i>Issue Date</i>	<ul style="list-style-type: none"> <li>• Not available.</li> </ul>
<i>This Data Sheet Contains</i>	<ul style="list-style-type: none"> <li>• Product and Company Identification: Synonyms changes from the previous Physical &amp; Chemical Properties: Multiple Properties version in section(s): Transport Information: Material Transportation Information Regulatory Information: United States.</li> </ul>