



## SAFETY DATA SHEET

### SECTION 1 — IDENTIFICATION

**Product Identifier**

**Product Name** AQUAFILL™  
**Product Code** 5003

**Relevant identified uses of the substance or mixture and uses advised against**

Recommended use Water soluble material for bonding or patching molds and cores.

**Details of the supplier of the safety data sheet**

**Manufacturer** Advanced Ceramics Manufacturing, LLC.  
7800 South Nogales Highway  
Tucson, AZ 85756

Telephone (General) 520.547.0850

**Emergency Telephone Number**

800.554.9964 - Hazardous Materials Support Center  
800.424.9300 - CHEMTREC (Spill related emergencies)

### SECTION 2 — HAZARD(S) IDENTIFICATION

**United States (US)**

According to OSHA 29 CFR 1910.1200 HCS

**Classification of the substance or mixture**

OSHA HCS 2012 AquaFill™ has no known hazardous properties.  
Skin Irritation 2 - H315  
The formula is proprietary information and is the property of Advanced Ceramics Manufacturing.

**Label Components**

The product does not require a danger label.

**Other Dangers**

OSHA HCS 2012



Eye Contact – Direct contact may cause irritation.  
Skin Contact – Direct contact may cause irritation.  
Inhalation – If dry sanded, provide ventilation to maintain a dust level below the PEL/TLV.  
Ingestion – Direct contact may cause irritation.  
Signs & Symptoms of Exposure to Airborne Dust – May result in cough, dyspnea, wheezing, or impaired pulmonary functions.

### SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Mixture (water-soluble patching material)

**Mixtures**

Chemical Name:	Identifiers	WT%	TLV (mg/m <sup>3</sup> )	PEL (mg/m <sup>3</sup> )
Water Soluble Binder		1%-30%	NE	NE
Ceramic Microspheres	CAS: 66402-68-4	10%-90%	10 ( I ) / 3 ( R )	15 ( T ) / 5 ( R )
	( T ) - Total	( R ) - Respirable	( I ) - Inhalable	( NE ) - Not Established

### SECTION 4 — FIRST-AID MEASURES

**Contact with Eyes** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention

**Contact with Skin** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used

**Inhalation** Move the injured person to fresh air. If not breathing, initiate pulmonary resuscitation. Get medical attention.

**Ingestion** No specific information available.

**Most important symptoms and effects, both acute and delayed**

Refer to section 11 - Toxicological Information.

**Indication of any immediate medical attention and special treatment needed**

Refer to section 4.

### SECTION 5 — FIRE-FIGHTING MEASURES

**Extinguishing Media**

Suitable Extinguishing Media For a small fire, use dry chemical powder. For a large fire, use water spray, fog, or foam.  
Unsuitable Extinguishing Media Avoid the use of streaming water, as this may spread the fire.

**Special hazards arising from the substance or mixture**

Unusual Fire and Explosion Hazards The product is not flammable.

Advice for Firefighters Always wear full fire prevention gear: hardhat with visor, fireproof clothing, work gloves and a respirator.

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure an adequate ventilation  
 Emergency Procedures Ensure an adequate ventilation

### Environmental Precautions

No specific requirement

### Methods and material for containment and cleaning up

Containment/Clean-up Measures Mop up and place in a closed container and hold for waste disposal, or reuse.

## SECTION 7 — HANDLING AND STORAGE

### Precautions to be taken in Handling and Storing

Handling Keep container closed to avoid dry out.

### Conditions for safe storage, including any incompatibilities

Storage Store in tightly closed containers in a dry, cool and well-ventilated place. Keep away from sources of heat, sparks and flame.

### Specific End Use

Not indicated.

## SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

PNOS TLV-TWA<sub>ACGIH</sub> = No exposure limit value known.  
 TLV-TWA<sub>ACGIH</sub> = No exposure limit value known.

### Exposure Control

### Engineering Measures/Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure eyewash stations and safety showers are proximal to the workstation location.

### Personal Protective Equipment Pictograms



Respiratory Protection

Use of a Class NIOSH N95 respirator where dust is generated is recommended. Follow the OSHA respirator regulations found in 29 CFR 1910.134.

Eye Protection

Chemical resistant safety glasses or goggles as a minimum.

Skin Protection

Rubber gloves should be worn to prevent excessive or repeated skin contact.

Other Clothing & Equipment

Work clothing or coveralls to minimize skin contact.

General Industrial Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Do not eat, drink or smoke during use. Keep away from food and feedstuffs. Do not breathe dust. Avoid creating dust.

Ventilation

Maintain positive ventilation.

Environmental Exposure Controls

Follow best practice for site management and disposal of waste.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

### Information on Physical and Chemical Properties

Appearance: Gray to light brown granular  
 Smell: no detectable odor  
 Odor threshold: not available  
 pH: not available  
 Melting point / freezing point: not available  
 Initial boiling point and boiling range: not available  
 Flash point: not available  
 Evaporation rate: not available  
 Flammability (solid, gas): not available  
 Upper / lower flammability or explosive limits: not available  
 Vapor pressure: not available  
 Vapor density: not available  
 Relative density: 1 g/cm<sup>3</sup>  
 Solubility: soluble in water  
 Partition coefficient n-octanol/water: not available  
 Auto-ignition temperature: not applicable  
 Decomposition temperature: not available  
 Viscosity: not applicable  
 Explosive properties: not applicable  
 Oxidising properties: not applicable

## SECTION 10 — STABILITY AND REACTIVITY

Reactivity

None are to be anticipated under normal or recommended handling and storage conditions. During decomposition the toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides, aldehydes, carboxylic acids, and smoke.

Chemical stability

The product is stable under normal conditions of use and storage.

Possibility of hazardous reactions

Refer to Reactivity.

Conditions to avoid

Not known.

Incompatible materials

Refer to Reactivity.

Hazardous decomposition products	Not known.
TSCA Listing	All ingredients are on the TSCA inventory, or exempt.

## SECTION 11 — TOXICOLOGY INFORMATION

Information on toxicological effects	No toxicological effects acute and / or chronic known as a result of exposure to the product. Contact with eyes may cause mechanical irritation. The frequent and prolonged contact with skin may cause irritation and defatting.
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## SECTION 12 - ECOLOGICAL INFORMATION

Toxicity	No effect eco-toxicological acute and / or chronic known as a result of exposure to the product.
Persistence and degradability	Information not available.
Bioaccumulative potential	Information not available.
Mobility in Soil	Information not available.
Other adverse effects	Information not available.
Other Information	Information not available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods	Not an RCRA Hazardous waste. Dispose of in accordance with applicable federal, state and local regulations. These provisions shall also apply to contaminated containers. It is therefore recommended to make contact with the authorities in charge or approved specialist companies that can give you guidance on how to prepare for disposal. Appropriate disposal could be combustion, recycling, disposal site.
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## SECTION 14 - TRANSPORT INFORMATION

	The product is not classified as dangerous according to the provisions of existing legislation on the transport of dangerous goods by road (ADR) and by Rail (RID), by sea (IMDG Code) and by air (IATA).
UN Number	Not applicable.
UN Proper shipping name	Not applicable.
Transport hazard class(es)	Not applicable.
Packing group	Not applicable.
Environmental hazards	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

## SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

- OSHA 29 CFR 1910.1200 HCS - Consolidated Safety at the workplace
- OSHA 29 CFR 1910.120 HCS - Hazardous Waste Operations and Emergency Response

## SECTION 16 — OTHER INFORMATION

Last Revision Date	7/20/2016
Preparation Date	7/20/2016
Key literature references and sources for data:	<ul style="list-style-type: none"> <li>• 29 CFR 1910.1200(f) and Appendix C of 29 CFR 1910.1200 (and subsequent amendments and adjustments)</li> <li>• OSHA GHS (and subsequent amendments and adjustments)</li> <li>• OSHA Hazard Communication Standard (HCS) (and subsequent amendments and adjustments)</li> <li>• 1910 Subpart G - Occupational Health and Environmental Control (and subsequent amendments and adjustments)</li> <li>• Safety data sheet of the supplier of the product</li> </ul>

### Acronyms:

ACGIH:	American Conference of Governmental Industrial Hygienists
ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	Chemical Abstracts Service
CLP:	Classification, Labeling and Packaging
EINECS:	European Inventory of Existing Chemical Substances
GHS:	Globally Harmonized System
IATA:	International Air Transport Association
IMDG Code:	International Maritime Code for Dangerous Goods
OSHA:	Occupational Safety and Health Administration
PBT:	Persistent, Bioaccumulative, Toxic
PEL:	Permissible Exposure Limit
PNOS:	Particles Not Otherwise Specified
RCRA:	Resource Conservation and Recovery Act
REACH:	Registration, Evaluation, Authorization and Restriction of Chemicals
RID:	Regulation on the Inland transport of Dangerous goods by rail
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act
TWA:	Time-Weighted Average
vPvB:	very Persistent, very Bioaccumulative

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