



## SAFETY DATA SHEET

### SECTION 1 — IDENTIFICATION

<b>Product Identifier</b>	
<b>Product Name</b>	AQUASEAL™
<b>Product Code</b>	3818
<b>Relevant identified uses of the substance or mixture and uses advised against</b>	
Recommended use	AquaSeal™ is specially formulated to seal water-soluble mandrel and prevent resin migration.
<b>Details of the supplier of the safety data sheet</b>	
<b>Manufacturer</b>	Advanced Ceramics Manufacturing, LLC. 7800 South Nogales Highway Tucson, AZ 85756
Telephone (General)	520.547.0850
<b>Emergency Telephone Number</b>	
	800.554.9964 - Hazardous Materials Support Center 800.424.9300 - CHEMTREC (Spill related emergencies)

### SECTION 2 — HAZARD(S) IDENTIFICATION

<b>United States (US)</b>	
<b>Classification of the substance or mixture</b>	
OSHA HCS 2012	AquaSeal™ 3818 has no known hazardous properties. Skin Irritation 2 - H315 The formula is proprietary information and is the property of Advanced Ceramics Manufacturing.
<b>Label Components</b>	
	The product does not require a danger label.

<b>Other Dangers</b>	
OSHA HCS 2012	



Eye Contact – Direct contact may cause irritation.  
Skin Contact – Direct contact may cause irritation.  
Inhalation – No specific information available, but unlikely route of exposure.  
Ingestion – No known hazard  
Signs & Symptoms of Exposure to Airborne Dust – N/A

### SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization	Mixture (water-soluble sealing material)			
Mixtures	The product does not contain substances classified as dangerous in accordance to OSHA 29 CFR 1910.1200 HCS.			
<b>Materials:</b>	<b>Identifiers</b>	<b>WT%</b>	<b>TLV (mg/m<sup>3</sup>)</b>	<b>PEL (mg/m<sup>3</sup>)</b>
Non-toxic polymer (Trade Secret)		1%-30%	NE	NE
Water	7732-18-5	>70%	NE	NE
	( T ) - Total	( R ) - Respirable	( I ) - Inhalable	( NE ) - Not Established

### SECTION 4 — FIRST-AID MEASURES

General Information	In case of persistent problem, consults a physician.
Contact with Eyes	Flush eyes with running water for 15 minutes — lift upper and lower eyelids.
Contact with Skin	Wash skin thoroughly with mild soap and water.
Inhalation	No specific information available, but unlikely route of exposure.
Ingestion	No specific information available.
<b>Most important symptoms and effects, both acute and delayed</b>	
	Refer to section 11 - Toxicological Information.
<b>Indication of any immediate medical attention and special treatment needed</b>	
	Refer to section 4.

### SECTION 5 — FIRE-FIGHTING MEASURES

<b>Extinguishing Media</b>	
Suitable Extinguishing Media	Use fire nature appropriate extinguishing media. For example: foam, carbon dioxide, extinguishing powder
Unsuitable Extinguishing Media	Avoid the use of streaming water, as this may spread the fire.
<b>Special hazards arising from the substance or mixture</b>	
Unusual Fire and Explosion Hazards	Solid active ingredient heated in open flame can produce potentially toxic substances.
Advice for Firefighters	Always wear full fire prevention gear: hardhat with visor, fireproof clothing, work gloves and a respirator.

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures</b>	
Personal Precautions	Ensure an adequate ventilation
Emergency Procedures	Ensure an adequate ventilation
<b>Environmental Precautions</b>	

No specific requirement

#### Methods and material for containment and cleaning up

Containment/Clean-up Measures Soak up with inert absorbent such as sand, earth or vermiculite and put in closed container for prompt disposal.

### 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

Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable exposure limit values

#### Personal Protective Equipment Pictograms



Respiratory Protection No special respiratory requirements — unlikely route of exposure. In case of exceeding recommended exposure limits in workplace, use of a Class NIOSH N95 respirator. 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: Blue or clear liquid

Smell: slight sweet odor

Odor threshold: not available

pH: not available

Melting point / freezing point: not available

Initial boiling point and boiling range: 212°F/100°C

Flash point: noncombustible

Evaporation rate: not available

Flammability (solid, gas): not available

Upper / lower flammability or explosive limits: not available

Vapor pressure: not available

Vapor density: <1

Relative density: 1.0 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 Small amounts of hydrogen chloride.

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 Not known

Hazardous decomposition products Refer to Reactivity

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.

### 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	12/12/2023
Preparation Date	11/15/2017
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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