



SAFETY DATA SHEET

SECTION 1 — IDENTIFICATION

Product Identifier

Product Name AQUASEAL™

Product Code 3818

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

Recommended use Aquaseal™ is specially formulated to seal water-soluble mandrel and prevent resin migration.

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)

Classification of the substance or mixture

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.

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 – 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.

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.

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 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.

Special hazards arising from the substance or mixture

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

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 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.
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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.
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Specific End Use

	Not indicated.
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SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION**Control Parameters**

PNOS	TLV-TWA _{ACGIH} = No exposure limit value known. TLV-TWA _{ACGIH} = No exposure limit value known.
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Exposure Control**Engineering Measures/Controls**

	Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable exposure limit values
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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 ³
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.
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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.

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 8/4/2016

Preparation Date 8/4/2016

- Key literature references and sources for data:
- 29 CFR 1910.1200(f) and Appendix C of 29 CFR 1910.1200 (and subsequent amendments and adjustments)
 - OSHA GHS (and subsequent amendments and adjustments)
 - OSHA Hazard Communication Standard (HCS) (and subsequent amendments and adjustments)
 - 1910 Subpart G - Occupational Health and Environmental Control (and subsequent amendments and adjustments)
 - Safety data sheet of the supplier of the product

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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