

Ultra-Archaea®

Safe, Versatile, Proven Bioremediation



#1 RATED BIOREMEDIATION
FORMULA IN RECENT
BP - LOUISIANA STATE
UNIVERSITY TESTING

Naturally occurring microbes help bioremediate oil spills and other contaminated areas

Where do they come from?

Ultra-Archaea are an archaea-based collection of over one hundred different species of microbes that are cultivated from rugged environments such as undersea vents or sites where there is volcanic activity. They are then cultivated with crude oil as the only food source. Therefore they grow on thousands of organic compounds from benzene to polycyclic aromatic hydrocarbons. 100% natural. Odors are eliminated within a few hours to a day.

The result is 100% natural, hardy and fast-acting microbes that have an affinity for oil and other hydrocarbons, as well as organic waste. This specific collection of microbes (Ultra-Archaea) has not been genetically altered or engineered. These naturally occurring microbes have been on the EPA National Contingency List since its inception.

How do they work?

Ultra-Archaea will digest hydrocarbon molecules and break them down into harmless byproducts of carbon, carbon dioxide and lipids (a natural, soluble fatty material that is food for fish and plants). The more complex the hydrocarbon, the longer this process may take (for example, kerosene and diesel will be consumed more quickly than motor oil). This naturally occurring process is supercharged by adding these specific archaea to any oil spill or contaminated area (see below). It infuses 5 to 90 billion archaea per gram into an oil spill, greasy catch basin, oil/water separator, etc. and within hours these archaea have reproduced from billions per gram to trillions. With water, oxygen and an organic food source (such as oil) these microbes will form vast colonies and digest and remediate oil on land and on water, as well as grease traps, septic tanks, storm drains and almost any other area where contaminants are present.

What happens to them when they are “done”?

After approximately ninety days or when the microbes have been deprived of water, oxygen, or a food source, the microbe colony will begin to naturally die off, allowing the indigenous microbes to return to pre-contamination levels.



How are they shipped?

The Ultra-Archaea are shipped dormant in a bentonite clay or sugar based carrier. When the carrier dissolves in water, the archaea become activated and water may become temporarily murky due to the infusion of the clay.

What else do I need to know?

Ultra-Archaea products should be stored and applied between 32°F and 120°F (Ideal temp is 40°F - 110°F). Temperatures outside that range may cause the microbes to become ineffective. Ultra-Archaea should not be exposed to radiation. Ultra-Archaea should only be used in applications where the pH is between 5.0 and 8.5. Visit our website, www.Ultra-Archaea.com to view our FAQs and test data.



Test samples: Container on left shows untreated oil and water. Container on right was treated with Ultra-Archaea and shows that only lipids were left after the bio-remediation took place. The dark material in the bottom of the container is the clay carrier.

Ultra-Archaea® Shakers



- + Ultra-Archaea are housed in a bentonite clay powder that provides the slightly moist environment needed for them to live.
- + Two sizes of shakers available for application on smaller spills or contained areas.
- + Resealable/water-proof containers keep archaea dry/dormant until they are needed.



NOTE: All Ultra-Archaea products are stamped with an expiration date and have a typical shelf life of approximately 5 years.

Ultra-Archaea® Water Soluble Packets



- + 4 oz. water soluble packets can be thrown into oil/water separators, catch basins, grease traps and other areas to facilitate oil and grease removal.
- + Small size, big results — no measuring, scooping or spreading. Simply place the entire packet into the area that needs to be cleaned. The water soluble packet will dissolve and allow the Ultra-Archaea to spread throughout the area.



5232

Ultra-Archaea® Bulk Bags



- + Bulk bags (25 lbs.) are available for large spills, open water applications or frequent use areas.
- + Keep on hand for refilling Shakers or other smaller containers or for large, unexpected spills.



5233

Ultra-Archaea® Tablets



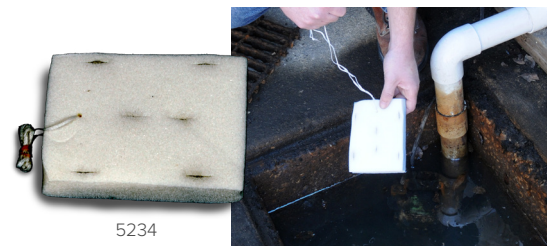
- + Small tablets with a concentrated amount of Ultra-Archaea (20-billion per gram)
- + Great for use in septic tanks, RV blackwater tanks, small grease traps, and stormwater catch basins



5252

Ultra-Archaea Booms®

- + Specially-treated polyethylene foam used in Ultra-Archaea Booms allows it to float on the water's surface while also absorbing oil.
- + Six Ultra-Archaea tablets are inserted into slits in the foam sleeves - extended water contact causes the tablets to slowly dissolve, releasing the archaea into the water.
- + Booms can be dropped in, or tied off in catch basins (lanyards included), oil/ water separators or other areas where oily water can collect.



5234

Patents: See www.ultratechpatents.com

| Part# | Description | Weight |
|-------|--|------------------|
| 5238 | 6 Ounce Shaker | 6 oz (171 g) |
| 5239 | 28 Ounce Shaker | 28 oz (794 g) |
| 5232 | Water Soluble Packets 6-Pack | 4 oz (113 g) |
| 5233 | Bulk Bag | 25 lbs (11 kg) |
| 5234 | Archaea Boom (6-pack) | 2.0 lbs (1.0 kg) |
| 5252 | Archaea Tablets (12-pack, 24 tablets per tube) | 1.5 lbs (0.7 kg) |

It is important to be aware that Ultra-Archaea may not be the answer or 100% effective in every application. Consult with UltraTech's technical team to determine if your needs can be met with Ultra-Archaea.