

Allonnia 1,4 D-Stroy™ Specifications

Allonnia's 1,4 D-Stroy is a microbial culture containing species of bacteria able to degrade 1,4-dioxane under aerobic conditions in groundwater or in ex situ bioreactors. The culture is based on naturally occurring bacteria with end products of carbon dioxide and water. 1,4 D-Stroy is an enhanced bioremediation solution for 1,4-dioxane contaminated sites.

Chemical Composition Non-hazardous, naturally occurring, non-altered aerobic microbes in a water-based medium.

Properties

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| Appearance | Turbid, yellow-orange heterogeneous mixture of suspended biomass and nutrients |
| pH | 6.0-8.0 |
| Density | OD ₆₀₀ of ~6.5 (~1.9 X 10 ⁹ cells/mL) |
| Solubility | Suspended biomass in water-based medium |

Product Usage

1,4 D-Stroy is meant to be used in aqueous aerobic environments. It may be injected into aquifers via injection wells or direct push injection.

The bacteria may be diluted into aerobic water for short periods (1 day) of time prior to injection.

Dilution rates should be discussed with Allonnia prior to application.

Vessels should be stored in a refrigerated area out of the sun.

Product may be stored for up to one month at 4°C temperature.

Product Delivery and Handling

Delivery in portable vessel.

Store in a cool, dry place at 4°C.

Both the vessel and cooler must be returned to Allonnia.

Health and Safety

The 1,4 D-Stroy bacteria are considered non-hazardous and should be handled per instructions provided upon purchase. Avoid contact with eyes or mouth. Personal protective equipment should always be worn while handling materials.