



Technical Report

EVALUATION OF LONGEVITY FOR FORTICEL™ MOLD PREVENTION COATING FOR BUILDING MATERIALS

Test Purpose

The purpose of the reported data in this bulletin is to evaluate the long term efficacies of FortiCel™, a product of Protective Coatings Group, LLC, designed to prevent the promotion of mold growth on construction products including wood, concrete, and sheetrock. Material samples were collected and treated with FortiCel™ according to the manufacturer's recommended application rate and then subjected to the testing criteria defined in the following protocol.

Test Overview

Pieces of kiln dried pine dimensional lumber were cut from normal stock and prepared in a manner consistent with building materials. Two samples, each a 2" x 4" x 18" long were prepared to act as untreated controls and two additional prepared and coated on all sides with FortiCel™ applied using an ALLPRO 300T HVLP gun.

These samples were then soaked for a period of 8 days in Distilled Water to determine release rate of one of the active ingredients. Release rates were consistent for 1 and 8 days which would be expected given the volume of water, 10L, used and the ion exchange nature of the active ingredient being measured. Samples of the distilled water were then bottled and sent for analysis by ACZ Laboratories of Steamboat Springs, CO. The liquid was then digested according to EPA Method M200.2 for total digestion via a hot plate and then the resulting material analyzed using Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) according to EPA Method M200.8.

Results

The raw results of these tests, measured in mg/L/day, are shown in the following table:

| Sample Label | Results (mg/L/day) |
|----------------|--------------------|
| FortiCel™ | 0.0012 |
| Control Sample | 0.0000 |

From these release rates you can calculate the expected longevity based on the total amount of active ingredient present in the coated surface (a factor based on the load rate in the percent solids left in the thickness of coating applied) and dividing that by the result above, taking into account the surface area treated and the volume of water used. In this calculation the results are as follows:

Longevity Calculation Result

| Sample Label | Longevity in Years |
|--------------|--------------------|
| FortiCel™ | 70.77 Years |