

Novinda Amended Silicates AS-HgX Determined to be Non-Explosible in Certified Laboratory Test

Introduction

Novinda Corporation sells a non-carbon reagent for capture of vapor-phase mercury from the flue gas of coal-fired power plants. This material is an option for utilities to meet the EPA MATS requirement for stack mercury emissions beginning in April of 2015. Amended Silicates AS-HgX consists of a bentonite substrate that is amended with a metal sulfide that acts as the reagent to capture mercury from the flue gas as mercuric sulfide, the most stable form of mercury found in nature as the mineral metacinnabar.

A sample of the Novinda product from the full-scale production facility was recently submitted for explosibility testing. The test was conducted by Chilworth Technology, Inc. of Princeton, NJ (www.chilworth.com). Chilworth is internationally recognized for its expertise in explosion and process safety and testing.

Results

Chilworth tested the Novinda sample of AS-HgX following the protocol of ASTM E1226-10, the Standard Test Method for Explosibility of Dust Clouds. The sample was tested 'as-received' as well as sieved to isolate the finest fraction of the sample provided. These sub-samples were subjected to a series of increasingly severe explosive environments per the ASTM protocol proceeding from 'as-received' to sieved and dried material tested in a 20-liter spherical vessel with a 5-kilojoule ignition source. In all cases the test results did not meet the requirements to be designated explosible as defined in the Standard Test Method.

In accordance with the method, Novinda AS-HgX qualified for a No Go (Not Explosible) rating.

As such the Kst of the material was considered to be Zero.

Details of the Testing results are available to interested parties on request to Novinda Corporation. Please contact Dr. Thomas Gale, Director of Product Development at t.gale@novinda.com or telephone at 720.473.8341.