

# CERTIFICATE OF ACCREDITATION

## **ANSI-ASQ National Accreditation Board**

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

ioKinetic, LLC 95 Stiles Road Salem, NH 03079

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2005

while demonstrating technical competence in the field of

# **TESTING**

Refer to the accompanying Scope of Accreditation for information regarding the types of tests to which this accreditation applies.

AT-1922
Certificate Number

ANAB Approval

Certificate Valid: 03/21/2017-02/18/2019 Version No. 004 Issued: 03/21/2017





## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

## ioKinetic, LLC

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### **TESTING**

Valid to: February 18, 2017 Certificate Number: AT-1922

### I. Combustible Dust Testing

Items, Materials or Products Tested	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used	Key Equipment or Technology*
Combustible Dust	Explosion Severity (K <sub>St</sub> , (dP/dt) <sub>max</sub> , P <sub>max</sub> , c <sub>w</sub> )	ASTM E1226 Standard Test Method for Explosibility of Dust Clouds	20-L Sphere Apparatus manufactured by Kuhner AG of Switzerland
	Minimum Ignition Energy (MIE)	ASTM E2019 Standard Test Method for Minimum Ignition Energy of a Dust Cloud in Air	MIKE3 Apparatus manufactured by Kuhner AG of Switzerland
	Minimum Auto-Ignition Temperature (MAIT)	ASTM E1491 Standard Test Method for Minimum Autoignition Temperature of Dust Clouds	BAM Oven manufactured by Swissi AG of Switzerland
	Minimum Explosible Concentration (MEC)	ASTM E1515 Standard Test Method for Minimum Explosible Concentration of Combustible Dusts	20-L Sphere Apparatus manufactured by Kuhner AG of Switzerland
	Hot-Surface Ignition Temperature (HSIT) of dust layers	ASTM E2021 Standard Test Method for Hot- Surface Ignition Temperature of Dust Layers	Uniformly heated surface
	Burn Rate of dust layers	UN Test 4.1	Sample preparation trough and torch
	Particle Size Analysis	Instrument Operating Instructions	Cilas 990D Particle Size Analyzer
	Moisture Content	Instrument Operating Instructions	Mettler Toledo HR83





**II. Chemical Reactivity Testing** 

Items, Materials or Products Tested	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used	Key Equipment or Technology*
Reactive Chemicals	Onset temperature Heat of reaction Temperature / pressure rise rate Amount of gas generation	ASTM E1981 Standard Guide for Assessing Thermal Stability of Materials by Methods of Accelerating Rate Calorimetry	ARC® 254 manufactured by Netzsch™ Group of Selb, Germany (Low thermal inertia)
	Onset temperature Heat of reaction Temperature / pressure rise rate Amount of gas generation	ASTM E1981 Standard Guide for Assessing Thermal Stability of Materials by Methods of Accelerating Rate Calorimetry	Automatic Pressure Tracking Adiabatic Calorimeter (APTAC <sup>TM</sup> ) currently manufactured by Netzsch Group of Selb, Germany (High thermal inertia)
	Onset temperature Heat of reaction Melting / boiling point Heat flow rate	ASTM E537 Standard Test Method for the Thermal Stability of Chemicals by Differential Scanning Calorimetry	DSC 200 F3 Maia – Differential Scanning Calorimeter manufactured by Netzsch Group of Selb, Germany
	Onset temperature Mass loss Rate of mass loss	ASTM E2550 Standard Test Method for Thermal Stability by Thermogravimetry	TG 209 F3 Tarsus – Thermogravimetric analyzer manufactured by Netzsch Group of Selb, Germany

**III. Physical-Chemical Properties Measurements** 

Items, Materials or Products Tested	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Chemicals	Density	ASTM D4052 Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter
	Speed of Sound	Instructional Manual, Dated 01/12/2015 (Document # D17IB001EN-M)
	Heat Capacity	ASTM E1269 Standard Test Method for Determining Specific Heat Capacity by Differential Scanning Calorimetry

#### Notes:

- 1. \* =as applicable
- 2. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-1922.



Version 004 Issued: 03/21/2017 Page 2 of 2

