

# AIT 551

## AUTOIGNITION TEMPERATURE OF LIQUIDS APPARATUS

**Autoignition temperature is the lowest temperature at atmospheric pressure at which a substance will burst into flame in the absence of an external source of ignition (spark or flame). The AIT 551™ (Autoignition Temperature Tester) is used for the determination of the autoignition temperature of liquid samples using visual observation and sample temperature measurement.**



### APPLICATIONS

The measurement of the autoignition temperature is an essential input for hazard analysis in industries and technologies employing flammable liquids. Liquid materials exposed to elevated temperatures may create flammable vapors which ignition may lead to an explosion. The AIT 551 is a necessary tool for hazard analysis of new technologies, operational safety control, research and development. The results obtained are used for the classification of temperature class of liquid chemicals.

### ADVANTAGES & FEATURES

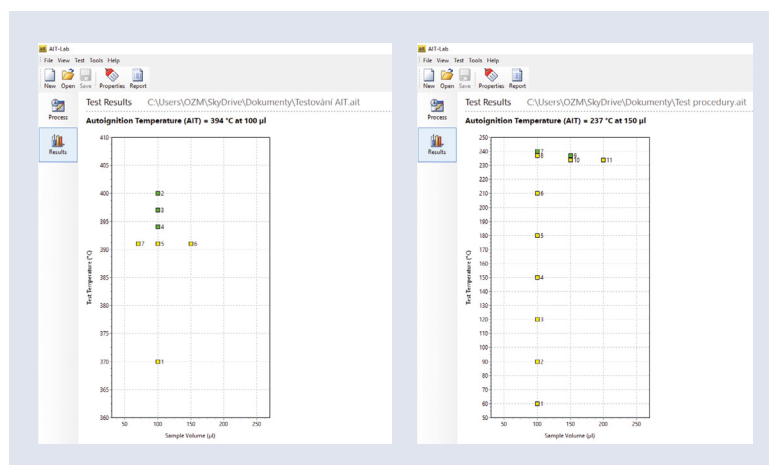
- ▶ Freely mounted thermocouples allow for the use of several different types of flask
- ▶ Automatic detection of ignition of the sample in the flask
- ▶ Specially designed oven door for easy handling of the flask
- ▶ Corrosion resistant stainless steel case
- ▶ Testing temperature up to 850 °C
- ▶ Software evaluation of temperature records

### COMPLIANCE

- **ASTM E659-78:** Standard Test Method for Autoignition Temperature of Liquid Chemicals
- **NFT 20-036** Chemical products for industrial use. Determination of the relative temperature of the spontaneous flammability of solids



AIT-Lab software – measurement of auto-ignition temperature



AIT-Lab software – results of measurements



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