# **Reactive Hazard Characterization** A Smart Testing Strategy



### **Screening for Energetic Behavior**

- CHETAH: Software tool to predict both thermochemical properties and certain reactive chemicals hazards.
- DSC: Good choice if sample material is limited. Fast and easy method.
- Carius Tube: Uses glass to address metal reactivity concerns.

## **Intended Chemistry**



#### **Reaction Calorimeter**

• RC1: Measures the amount of energy released (or absorbed) from a chemical reaction. Optimizes process conditions to facilitate safe scale-up.



### **Upset Conditions**

### Adiabatic Calorimetry

- ARC<sup>TM</sup>: Obtains kinetic parameters as well as temperature and pressure profiles for a sample.
- VSP2<sup>™</sup>: Data applicable for vent sizing. Suitable for semi-batch additions of liquid.
- ARSST™: Ideal for highly energetic, gas-generating samples.

Contact DEKRA to review your process and discuss the Reactive Hazard Test that best addresses your needs.

#### CONTACT US

#### DEKRA Process Safety North America www.dekra.us/process-safety



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