

Contain the Tiger

Have you Accounted for all Energy from Reactive Chemicals in your Process Design?



Are you Documenting Safe Operating Limits for your process?

Temperature, Pressure and Batch Size are critical parameters to evaluate for process chemistry. Heat capacity for a reactor needs to be evaluated and documented.

Can your Desired Process Chemistry lead to a Runaway Reaction?

Adiabatic calorimetry is important to characterize the adiabatic temperature rise and other kinetic parameters of a chemical system.



What can go wrong?

Identifying causes that could lead to upset conditions is critical to understanding the impacts. Causes include: loss of cooling, mischarge of a batch or contamination.

How fast can it happen?

Understanding the kinetics will answer this question and allow a safe response time to be established. Actions to deviations should be documented in operating procedures.



Do you have Adequate Controls?

This includes interlocks and emergency pressure relief system design. Be sure to understand the heat and gas rate and quantity generation.

This DEKRA Safety Insight provides more information about preventing reactive chemical incidents.

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