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**Introduction:****Lab Hazard Trigger Grid**

*The Lab Hazard Trigger Grid is used as a tool to complete hazard assessment and planning for research activities as defined in The Dow Chemical Company R&D Management of Change Work Process.*

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LAB HAZARD ASSESSMENT  
TRIGGER GRID

<b>Lab Hazard Risk Assessment Grid</b>		
<b>Emphasis Areas</b>	<b>Hazards to Consider</b>	
General Considerations	Is a Pre-Start Up review/walk-through required?	
	Is an EH&S contact required to review the changes and be present at the prestart-up walk-through?	
General Changes	Change in Personal Protective Equipment Requirements	
	New Person/Operator	
	New procedure or change to existing procedure	
	Sale of Product	
	Ergonomic Hazards	
Equipment/Operating Changes	Operating Pressure	Glassware
		Metal
		Non-glassware/non-metal (e.g. PVC, teflon, polyethylene tubing, tygon tubing)
	Temperature	Ovens or equipment operating at elevated temperatures
		Cryogenic materials
	Operation	Unattended operation
		Change impacts existing safety devices
	Equipment / Area	Electrical Sources
		New or modifications to radiation sources
		Decommissioning a lab/area
		New or modifications to equipment larger than laboratory bench scale
		New or modified laboratory bench scale equipment/instrumentation where changes are not covered under a separate trigger
	Ventilation System	New ventilation system
		Using existing ventilation in a new/different way
	CHEMICAL CHANGE	Health
Asphyxiant, lung damage, sensitizer, hepatoxins, nephatoxins, neurotoxins, blood toxins, nervous system toxins		
Flammability		Flammable gas (including gas generation from the reaction), Flammable liquids: Materials with FP <73F, NFPA Class IA or IB
		Flammable material NFPA Class IC, Materials with FP >73F to <100F
		Combustible liquids: NFPA Class II, IIIA, IIIB, Materials with a FP > 100F and less than 200F
Reactivity		OSHA Organic Peroxide, OSHA Explosive, OSHA Unstable (Reactive)
		OSHA oxidizer, Peroxide former, Compressed Gases
Combsutible Dusts		Work involving the use of or the potential to create combustible dusts through handling/processing.
		Potential hazard for a flash fire or explosion exists when a dust cloud is suspended in air, or if dust covers surfaces due to poor housekeeping.
Flammable Solids		A solid, other than a blasting agent or explosive, that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily, and when ignited, burns so vigorously and persistently as to create a serious hazard.
Thermodynamics		Potential Energy Release for Desired Reaction