

**Disclaimer:**

---

*These safety resources, prepared solely for the use of The Dow Chemical Company were provided by a variety of sources. It is your responsibility to customize the information to match your specific operations. Neither The Dow Chemical Company nor any of its employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by The Dow Chemical Company. The views and opinions of authors expressed herein do not necessarily state or reflect those of The Dow Chemical Company, and shall not be used for advertising or product endorsement purposes.*

---

**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.*

---

Do Not Copy

**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	OSHA Coorrosive, Carcinogen, Reproductive Toxin
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	