



Risk Assessment - Elephant Toothpaste Experiment

Risk Rating Key: **!! Very High** **! High Risk** **# Medium Risk** *** Low Risk**

Activity	Hazard	Risk Assessment (use Matrix)	Control Measure	Who	When
Elephant Toothpaste	Irritation of skin from Hydrogen Peroxide	# Medium Risk	Children are NOT to handle hydrogen peroxide. Use only 3% solution; ensure children wear safety glasses and avoid contact with skin; store out of children's reach	Educators	Before (prepare materials and brief children), During (supervise handling), After (clean surfaces and wash hands)
	Eye contact from accidental splashes during pouring or reaction	# Medium Risk	All participants wear safety glasses ; adults handle the pouring of hydrogen peroxide	Educators (children wear glasses)	Before (put on glasses), During (ensure glasses stay on)
	Spillage or overflow of foam – slipping hazard	# Medium Risk	Conduct activity in a large tray/tub or outdoors ; ensure children stay a safe distance away during the reaction. Hydrogen peroxide can be cleaned up with wet paper towels using gloves. Rinse bottle that was used during	Educators	Before (set up in proper area), During (maintain distance), After (clean up thoroughly)

Activity	Hazard	Risk Assessment (use Matrix)	Control Measure	Who	When
			experiment prior to placing in the trash can. Avoid direct inhalation		
	Ingestion of materials (yeast, soap, peroxide)	# Medium Risk	Ensure constant supervision ; educate children not to touch or ingest materials; label all containers clearly	Educators	Before (educate children, label materials), During (supervise closely)
	Warm water for yeast – risk of burns if too hot	# Medium Risk	Use water at warm, not hot , temperature (safe to touch); test temperature beforehand	Educators	Before (test water temperature), During (assist children in mixing)
	Allergic reactions or skin sensitivities (e.g. food coloring)	* Low Risk	Check for known allergies; children should wear gloves if needed	Educators	Before (check allergy info), During (provide gloves if necessary)
	Inhalation of chemical vapors (e.g. hydrogen peroxide, dish soap fumes)	* Low Risk	Conduct activity in a well-ventilated area or outdoors ; avoid placing nose directly over the reaction; limit time spent near open containers	Educators	Before (choose location), During (monitor exposure, provide reminders to avoid leaning in)
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Signature:		Date: 2/6/25	Signature: <i>Liz Sakeson</i>		
			Date: 10/6/25		