



## Safe Operating Procedures

SOPs are designed to help employees identify hazards, limitations, PPE, & safety training for specific equipment/tasks. Environmental Health and Safety, 414 J.M. Smith Hall

	<b>Equipment/ Task Name</b>	Mixing Ceramic Glazes
	<b>Departments Impacted</b>	Art & Architecture Department
	<b>Purpose</b>	Ceramic glaze is a layer or coating of a vitreous substance which has been fused to a ceramic body through firing. Glaze can serve to color, decorate or waterproof an item. The mixing of glazes add color depth and degree of finish to ceramics.
<b>TASK</b>	<b>HAZARDS</b>	<b>CONTROLS</b>
<b>1. Place measuring bucket on scale.</b>	Absorption hazards.	Residual chemicals can be found on the mixing bucket. Wear gloves when handling the bucket.
	Slip/spill hazards.	Use a container that is large enough to hold all of the powdered chemicals.
<b>2. Lift bag/container of powdered chemicals and scoop chemicals into the mixing bucket. Using a set scale and following a recipe, measure all ingredients in a large container.</b>	Inhalation of silica and other harmful dust.	<ul style="list-style-type: none"> <li>Turn on ventilation (if applicable) prior to pouring/scooping chemicals.</li> <li>Wear a dust mask or respirator to prevent the inhalation of dangerous dust.</li> </ul>
	Bodily injury from dropped bag/container of powdered chemicals.	Follow proper lifting techniques to prevent back injuries and items from dropping on feet.
	Eye hazards.	Wear eye protection to prevent dust particles from entering into the eyes.
	Absorption hazards.	<ul style="list-style-type: none"> <li>Wear rubber gloves to cut down on contact with the chemicals.</li> <li>Wear a rubber apron (if appropriate) to cut down on contact with chemicals.</li> </ul>
<b>3. Pour contents from measuring bucket into mixing bucket.</b>	Inhalation of silica and other harmful dust.	<ul style="list-style-type: none"> <li>Pour water into the mixing bucket to minimize dust.</li> <li>Wear a dust mask or respirator to prevent the inhalation of dangerous dust.</li> </ul>
	Bodily injury hazards.	<ul style="list-style-type: none"> <li>Follow proper lifting technique to prevent back injuries. Heavy lifting of the buckets can put strain on the back and muscles.</li> <li>Use a firm grip on buckets to prevent items from dropping on the feet.</li> <li>Place mixing bucket on a solid flat surface to prevent bucket from dropping.</li> </ul>
	Eye hazards.	Wear eye protection to prevent dust particles and splashes from entering into the eyes.



## Safe Operating Procedures

SOPs are designed to help employees identify hazards, limitations, PPE, & safety training for specific equipment/tasks.  
Environmental Health and Safety, 414 J.M. Smith Hall

	Absorption hazards.	<ul style="list-style-type: none"> <li>Wear rubber gloves to cut down on contact with the chemicals.</li> <li>Wear a rubber apron (if appropriate) to cut down on contact with chemicals.</li> </ul>			
	Slip hazards.	Clean up any spills immediately.			
<b>4. Mix and sieve the contents in the mixing bucket.</b>	Splash/spill hazards.	<ul style="list-style-type: none"> <li>Wear eye protection.</li> <li>Use a large bucket to prevent spills.</li> </ul>			
	Inhalation and absorption hazards.	Wear appropriate PPE.			
	Bodily injury.	<ul style="list-style-type: none"> <li>Follow proper procedures for operating handheld power tools. (Refer to Using Hand Operated Power Tools SOP).</li> <li>Secure the sieve to the bucket to prevent mixture and buckets from dropping.</li> </ul>			
<b>5. Clean buckets and mixing area.</b>	Splash and absorption hazards.	Wear appropriate PPE to reduce splash and absorption hazards.			
	Inhalation of silica and other harmful dust.	<ul style="list-style-type: none"> <li>Spray water or use a wet mop/sponge to minimize dust when cleaning. Never dry sweep.</li> <li>Wear a dust mask or respirator to prevent the inhalation of dangerous dust.</li> </ul>			
	Muscle strain.	Use proper lifting techniques when moving items.			
<b>Required Training:</b>		<b>Required Personal Protective Equipment (PPE)</b>			
1. Mixing ceramic glazes instructions.		1. Dust mask 2. Rubber gloves 3. Rubber apron (if appropriate)			
<b>SOP ID</b>	<b>A002</b>	<b>Related Documents</b>	<a href="#">Art Shop Manual</a>	<b>Creation/Revision Date</b>	<b>9/2018</b>

Suggestions, questions, or comments? Please contact EH&S