



UNC
ENVIRONMENT,
HEALTH & SAFETY

Job Safety Analysis

Safety Information for The University of North Carolina at Chapel Hill

All UNC Shops

JOB SAFETY ANALYSIS TOPIC:

Polyurethane Use



Title	Work Task	Hazards	Controls
Pre plan the work	<ol style="list-style-type: none"> 1. Schedule work for off-hours if possible 2. Coordinate with facilities manager and EHS to ensure proper notifications have been sent to building occupants 3. Select a proper polyurethane for the specific job 4. Select proper Personal Protective Equipment (PPE) 		<ul style="list-style-type: none"> • Training on use of Polyurethane coatings • PPE training • Review Safety Data Sheet to determine PPE needed and hazards associated with specific product • Read material label • If proper ventilation cannot be established, use gloves, Tyvek suit, and a half-face respirator with organic vapor cartridges
Before the job	<ol style="list-style-type: none"> 5. Don PPE 6. Check containers and equipment for broken or damaged parts 7. If ladders are used, ensure ladder functions properly 	<ul style="list-style-type: none"> • PPE donned improperly could result in injury • Damaged or broken parts could cause leaks, spills, or create unsafe conditions 	<ul style="list-style-type: none"> • PPE training • Replace any product that is damaged
Site Preparation	<ol style="list-style-type: none"> 8. Ensure work area is properly ventilated 9. Ensure work area is clear of slip/trip/fall hazards 	<ul style="list-style-type: none"> • An unclear workstation creates slip/trip/fall hazards • If area is not properly ventilated polyurethane vapors could cause health effects • Hyper sensitive occupants affected by polyurethane odors 	<ul style="list-style-type: none"> • Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended limits

Varnishing the Surface	10. Apply as many coats as needed to varnish the surface 11. Allow varnish to completely dry before removing any ventilation controls	<ul style="list-style-type: none"> If ventilation is removed too early, area could contain airborne hazards 	<ul style="list-style-type: none"> Follow the recommendations for drying times for each product
Clean-up	12. Clean brushes and equipment with approved products 13. Wash hands, forearms, and face thoroughly after handling products 14. Any contaminated clothing should be properly cleaned and should not leave the work place	<ul style="list-style-type: none"> Rags, steel wool, or other waste soaked with this produce can be flammable 	<ul style="list-style-type: none"> Use only the recommended cleaning products as some may not be compatible and cause reactions Do not allow waste to accumulate Dispose flammable waste in accordance with local fire regulations
Training	Employees must receive training on this JSA, PPE, ladder use, painting safety. EHS website at http://ehs.unc.edu/training/self-study/	Supervisor is responsible for ensuring the employee reviews the JSA and the EHS website guidelines.	
Created	Taylor Moore, March 15, 2019		
Referenced Material	EHS Website; Sherwin-Williams Safety Data Sheets		
Contact Info	For more information about this JSA and other JSAs, contact: <i>Department of Environment, Health and Safety</i> UNC-CH, 1120 Estes Drive Extension, Chapel Hill NC 27599 CB# 1650 (919) 962-5507 http://ehs.unc.edu		