

## **Processes involving Xylene and Ethanol**

Standard Operating Procedures for Chemicals or Processes			
1 Process	Solvent distillation (for recycling).		
Hazardous Materials and Chemicals	Ethanol, xylene, paraffin wax. Ethanol is flammable and a reproductive toxicant. Xylene is flammable, toxic and a suspected reproductive toxicant. Paraffin wax is not hazardous.		
3 Environmental / Ventilation Controls	Xylene and ethanol are volatile. Xylene distillation unit is vented to atmosphere. Nearby walk-in fume hood can be used for chemical handling. Any other chemical handling is done in the fume hood in the wet lab room (room 114). Limit any handling of xylene and ethanol outside of the fume hood.		
4 Personal Protective Equipment (PPE)	Standard PPE: Labcoat, goggles, closed toe shoes.		
5 Special Handling Procedures & Storage Requirements	Chemicals are stored in 5 gallon HDPE carboys in a specially designed and designated flammables storage room. No more than 10 gallons (two carboys) may be stored out this storage room, even temporarily.		
6 Spill and Accident Procedures	Spill kit is in cabinet next to distillation unit. Spill kit contains spill pads, gloves, bags. In the event of a spill, remove any source of spark or flame. Try to move spill toward walk in fume hood to ease cleanup. If spill is large and fumes are in the air, leave the room and call the UW Safety - RMMC at 307-766-3698. If exposed, remove clothing and use the emergency shower located directly outside of room. If someone is incapacitated, call 911 and initiate first aid if possible.		
7 Waste Disposal	This process produces a mixture of ethanol and paraffin wax that is hazardous waste. Fill out the waste request at <a href="http://www.uwyo.edu/safety">http://www.uwyo.edu/safety</a> and submit. Do not accumulate more than 55 gallons of this waste.		
8 Special Precautions for Animal Use (if applicable)	N/A		
Particularly hazardous	x YES: Blocks 9 to 11 are Mandatory		
substance involved?  9 Approval Required	NO: Blocks 9 to 11 are Optional.  Supervisor training required on this SP and supporting materials, as well as basic lab emergency procedures.		
10 Decontamination	Decontaminate surfaces with soapy water as necessary.		
11 Designated Area	Flammables storage room, fume hood next to distillation unit, and fume hood in room 114.		
Name (print) (Assessor):	Title:		
Signature (Assessor):	Date:		
Name (print) (PI, Lab Manager, or Unit Head): Title:			

## Individual Chemical SOP Example

9.	University of Wyoming Safety Web: www.uwyo.edu/safety/	
MUW	Phone: (307) 766-3277 Email: <u>uwehs@uwyo.edu</u>	
10	Regulated Materials Management Center Phone: (307)766-3698 Fax: (307)766-3699 Email: HAZMAT@uwyo.edu	

Signature (PI, Lab Manager, or Unit Head):	Date:
Date Sent to UW Safety:	