Chemical Safety Practices Recommendations Aza-englerin

Exposure Hazards *				
Category 2 Danger Toxic				
Response to Exposure				
Oral		Dermal	Inhalation	Injection
Rinse mouth; do not induce vomiting. Report to OHS.		Wash skin with soap and water for 15 minutes. Rinse eyes for 15 minutes. Report to OHS.	Leave area; go to clean air. Report to OHS.	Report to OHS.
Precautions	These statements are based on the literature available for similar drugs. Aza-englerin is a novel compound and uncharacterized, the hazards of exposure may be greater than presented and all precautions should be taken to prevent exposure. Discard garments as hazardous if contaminated with Aza-englerin.			
Personal Protective Equipment	Gloves (Latex or Nitrile) Skin Protection (Suit or Scrubs or Lab Coat) Eye Protection (Safety-glasses or Goggles) Closed-toe shoes Use N100 respirator if engineering controls are not available.			
Engineering Controls	Aza-englerin powder- Chemical Fume Hood (CFH) (1) Aza-englerin solution- CFH or Biosafety Cabinet (Class II, B2 BSC if aerosolized) Animal waste and bedding until 10 days after last treatment- CFH or Class II, B2 BSC			
	Avoid exposure to animal waste until 10 days after last treatment.			
<u> </u>	Dispose of bedding as hazardous material until 10 days after last treatment.			
	Empty Aza-englerin containers and unused Aza-englerin must be disposed of as hazardous. Follow LASP SOPs for preparation, handling, dosing, and disposal of Aza-englerin.			

* Hazard rating derived by applying safety factor (10) to Maximum Tolerable Dose (100mg/kg PO) (unpublished)

Inhalation of the smoke from the tree from which Englerin is extracted causes death.(2) Therapeutic dosage may alter 'blood sugar' and/or insulin resistance. (3) References:

1. National Research Council Committee on Prudent Practices in the L. The National Academies Collection: Reports funded by National Institutes of Health. Prudent Practices in the Laboratory: Handling and Management of Chemical Hazards: Updated Version. Washington (DC): National Academies Press (US) National Academy of Sciences.; 2011.

2. Beutler, inventor; The US, DHHS, NIH, Bethesda MD, assignee. Epoxy-Guaiane Derivatives and Treatment of Cancer. USA2010 11/11/2010.

3. Sourbier C, Scroggins BT, Ratnayake R, Prince TL, Lee S, Lee MJ, et al. Englerin A stimulates PKCtheta to inhibit insulin signaling and to simultaneously activate HSF1: pharmacologically induced synthetic lethality. Cancer cell. 2013;23(2):228-37.

Questions or concerns: Please contact EHS, Ted Witte, <u>theodore.witte@nih.gov</u> or 301-846-5860 Reviewed 12/26/2014 These recommendations are not final and may be updated.