

Chemical Safety Practices Recommendations

5-aza-2'-deoxycytidine (Decitabine, 5-AZA-CdR)

Exposure Hazards (1)			
Category 4 Warning Toxic  Harmful if swallowed.	Category 2 Warning Irritant  Causes skin irritation.	Category 2A Warning  Eye Irritation Causes serious eye irritation.	
Category 2 Warning  Germ Cell Mutagenicity Suspected of causing genetic defects.	Category 1B Danger  Toxic to Reproduction May damage fertility or unborn children.	Category 3 Warning Toxic  May cause respiratory irritation.	
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.
Special Precautions	Pregnant women should be extra cautious when working with 5-AZA-CdR.(2) Discard garments as hazardous if contaminated with 5-AZA-CdR.		
Personal Protective Equipment	Gloves (Double glove) (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	5-AZA-CdR powder- Chemical Fume Hood (CFH) 5-AZA-CdR solution- CFH or Biosafety Cabinet (Class II, B2 BSC if aerosolized)		
Animal Handling	No special precautions.		
Bedding Disposal	No special precautions. (3)		
Work Practices	Empty 5-AZA-CdR containers and unused 5-AZA-CdR must be disposed of as hazardous. Follow LASP SOPs for preparation, handling, dosing, and disposal of 5-AZA-CdR.		

1. 5-Aza-2'-deoxycytidine MSDS [Internet]. Sigma-Aldrich. 2014 [cited 10/27/2014]. Available from: <http://www.sigmaaldrich.com/united-states.html>.
2. NIOSH. NIOSH list of antineoplastic and other hazardous drugs in healthcare settings 2014. Cincinnati, OH: National Institute for Occupational Safety and Health, DHHS (NIOSH), U.S. Department of Health and Human Services CfDcAP; 2014 September 2014. Report No.: 2014-138 Contract No.: 2014-138.
3. van Groenigen CJ, Leyva A, O'Brien AM, Gall HE, Pinedo HM. Phase I and pharmacokinetic study of 5-aza-2'-deoxycytidine (NSC 127716) in cancer patients. Cancer research. 1986;46(9):4831-6.

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