

Post-Lab Questions

1. How much NaOH is required to completely react with the PLA.
2. Why is the Acidification step required?
3. Describe the appearance of the plastic before it is placed in solution and after it is placed in the solution.
4. Describe the appearance of the solution before the reaction starts and after the reaction is complete.
5. What is the pH of the solution after the reaction stops and before any HCl is added?
6. Does the plastic degrade under base hydrolysis conditions?
7. Explain how the conversion of polylactic acid cups into a cleaning agent is an example of green chemistry in action.

Data

Time	# Minutes	Temperature (°C)	Observation
	0		
	2		
	4		
	6		
	8		
	10		

# Drops 6M HCl	Color of Litmus Paper After Addition	pH	Acid or Base?
50			
100			
150			
200			
250			
300			
350			