

Separation of a Mixture

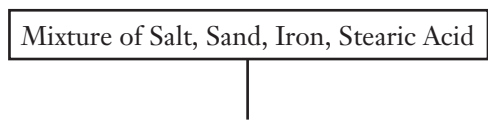
Data Table A. Physical Properties of Substances

Substance	Physical Appearance	Observations		
		Magnet Test	Solubility in Water	Behavior on Heating
Salt				
Sand				
Iron				
Stearic Acid				
	Physical Appearance	Effect of Water	Results of Filtration	
Sand + Salt				

Data Table B. Separation of a Mixture

1.

Flow Chart



2. Mixture Code _____

Procedure Step	Observations
----------------	--------------

Post-Lab Questions

1. The chemical formulas of iron, salt, and stearic acid are Fe, NaCl, and $C_{18}H_{36}O_2$, respectively. Are these substances elements or compounds?
2. Are any of the substances in Part A magnetic? Is magnetism a physical or chemical property? Explain.
3. Which substance(s) in Part A dissolved in water? Is solubility a physical or chemical property? Explain.
4. Which substance(s) in Part A have low melting points? Is melting point a physical or chemical property?
5. Is the combination of salt and sand obtained in Part B, step 8, a new compound or a mixture? Explain.
6. Describe the results of the filtration experiment in Part A. Which substance remained on the filter paper after filtration? Is the filtrate (the liquid that passed through the funnel) a pure substance? Explain.
7. Based on your observations in Part C, what are the components of the mixture?