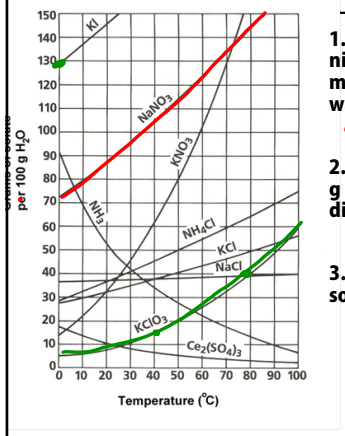
Bellringer: February 27th



1. How many grams of sodium nitrate ($NaNO_3$) are needed to make a solution with 300g of water at 10°C?

$\frac{80}{100} = \frac{x}{300}$ 240g

2. At what temperature does 40 g of potassium chlorate ($KClO_3$) dissolve in 100 g of water?

80 °C

3. What salt has the highest solubility at 0C?

Apr 4-8:30 AM

Wednesday, Feb. 27th

Objective: Students will define saturation and observe it in the lab.

1. Bellringer
2. Notes on Saturation
3. Saturation Pre-Lab

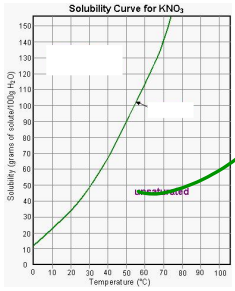
Due: Solutions Practice
Homework: Pre-Lab, Test Corrections

Apr 4-8:16 AM

Solubility Questions

Unsaturated Solutions

-- if the amount of solute dissolved is *less* than the maximum amount that could be dissolved, the solution is called ***unsaturated***

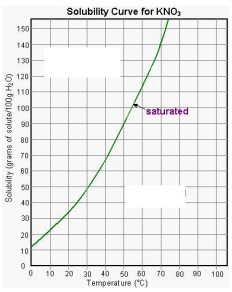


Unsaturated

Apr 12-7:33 AM

Saturated Solutions

-- a solution holding the ***maximum*** amount of solute per amount of solvent under the given conditions, is called a ***saturated solution***



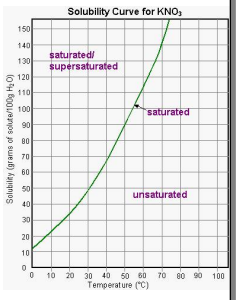
Apr 12-7:39 AM

Supersaturated Solutions

-- contain *more solute than the usual maximum amount* and is unstable is ***supersaturated***

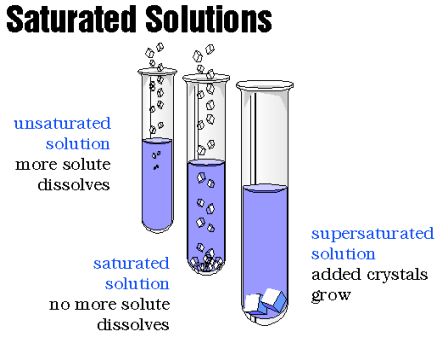
-- they cannot permanently hold the excess solute in solution and may release it suddenly

-- example: rain clouds



Apr 12-7:40 AM

Sketch:



Apr 12-7:41 AM

Solutions Vocab

How can we test what type of solution we have?

what happens when more crystals are added

How would we form a supersaturated solution?

add lots of solute until crystals grow

Apr 12-7:41 AM

Solutions Vocab

Heat of Solution -- the overall energy change that occurs during the solution formation process

Exothermic -- releases heat (gets warmer to touch)

Endothermic -- aborbs heat (gets colder to touch)

Apr 12-7:41 AM

Attachments

solutionSalt.zip

clipboard(20615).galleryitem