

Hot and Cold Packs by Gail Marsella

Questions

1. One cold pack and two different hot packs are described in this article. **Briefly** summarize the chemistry of each.
2. Using the standard heat of formation table determine the ΔH of the above reactions.
3. How is it that the "Heat Solution" hot pack never gets too hot?
4. What does ammonium nitrate look like? What is its chemical formula?
5. What is the method described to stop the "Heat Factory" hot pack from releasing heat?
6. What is the melting point of sodium thiosulfate? (answer in both Celsius and Fahrenheit)
7. It may surprise you to know that sodium thiosulfate is an antidote to cyanide poisoning. What is the chemical formula for sodium thiosulfate?
8. What is meant by "supercooled"?