

ANKARA UNIVERSITY
Department of Energy Engineering
ENE 205 – Material and Energy Balances
Instructor: Dr. Işık Semerci

HW-1 (Due 22/9/2017)

Select a chemical substance from Table B.1 in your textbook that begins with the same letter as your first name or the nearest possible letter (for example Işık → Iodine). Find and report the information listed below for this substance in references other than the course text or CD, and properly cite the references. Organize your report neatly and show all units.

(a) Specific gravity, molecular weight, normal melting and boiling points, Antoine constants, heats of fusion and vaporization at the normal melting and boiling points, and heat capacity as a function of temperature. If some of these properties are missing for your chosen species, choose a different species with complete physical properties.

(b) Several examples of industrial uses of the species.

(c) Toxicity data and environmental hazards associated with the species.

(d) At least three companies that manufacture the species.

(e) Worldwide demand and/or sales.

(f) Unit pricing (\$/kg, \$/gal, etc.). You should obtain the bulk pricing, not pricing of small units from laboratory supply firms such as Sigma-Aldrich.