

## work of cohesion per unit area

Of a single pure liquid or solid phase  $\alpha$ ,  $w_C^\alpha$  is the work done on the system when a column  $\alpha$  of unit area is split, reversibly, normal to the axis of the column to form two new surfaces each of unit area in contact with the equilibrium gas phase.

$$w_C^\alpha = 2 \gamma^\alpha$$

where  $\gamma^\alpha$  is the surface tension between phase and its equilibrium vapour or a dilute gas phase.

### **Source:**

PAC, 1972, 31, 577 (*Manual of Symbols and Terminology for Physicochemical Quantities and Units, Appendix II: Definitions, Terminology and Symbols in Colloid and Surface Chemistry*) on page 597