Specific Rotation. Specific optical rotations should be reported for isolated natural products and enantioenriched compounds when sufficient sample is available. Specific rotations is based on the equation:

$$[\alpha]_{\lambda}^{T} = \frac{100 \cdot \alpha}{l \cdot c}$$

$[\alpha]_{\lambda}^{T}$ = specific rotation (the units of the specific rotation, (deg)/(dm·g/mL), are implicit and are not included with the reported value)

α = **observed rotation** measured using a polarimeter

l = length of sample tube (dm)

c = concentration (**g/100 mL**);

λ - the wavelength of the light; symbol "D" is shown if sodium D line (589 nm) is employed;

T – temperature (ºC); if the temperature is omitted, it is assumed to be at standard room temperature (20 °C).

Example: $[\alpha]_D^{20}$ –25 (*c* 1.9,CHCl$_3$)