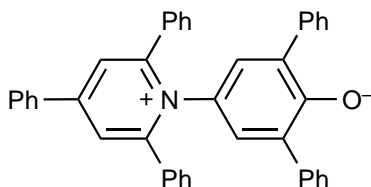


Dimroth–Reichardt E_T parameter

A measure of the *ionizing power* (loosely *polarity*) of a solvent, based on the maximum wavenumber of the longest wavelength electronic absorption band of:



in a given solvent. E_T , called $E_T(30)$ by its originators, is given by:

$$E_T = 2.859 \times 10^{-3} \nu$$
$$= 2.859 \times 10^4 \lambda^{-1}$$

where E_T is in kcal mol^{-1} , ν is in cm^{-1} and λ is in nm.

The so-called normalized E_T^N scale is defined as:

$$E_T^N = \frac{E_T(\text{solvent}) - E_T(\text{SiMe}_4)}{E_T(\text{water}) - E_T(\text{SiMe}_4)}$$
$$= [E_T(\text{solvent}) - 30.7]/32.4$$

See also *Grunwald–Winstein equation, Z-value*.
1994, 66, 1106