Test protocol

29Si sensitivity in organic solvent

Use sample 7 - OP(OSiMe3)3 at 20°C, in benzene-d6, non-spinning

Pulse sequence: relaxation delay -single hard pulse – acquisition with 1H decoupling

Acquisition parameters

Transmitter frequency: 0 ppm

Spectral width: 100 ppm (50 to −50 ppm)

Number of points in FID: 32k (real)

Number of scans: 16

Number of dummy scans: 4

Relaxation delay: 30 s

Receiver gain: optimize

Processing parameters

Window function: exponential, line broadening 5 Hz, i.e. exp(-5 π t)

Number of points in spectrum: 64k (real)

Phase correction: automatic or manual, adjust signals to pure absorption

Base line correction: yes

Evaluation

Evaluate signal-to-noise ratio for the SiMe3 signal (between 30 and 10 ppm), choose 40 ppm noise area from the region between 0 and −40 ppm. Use the formula



Where *Imax* is the maximal signal intensity and *npp* is the peak-to-peak value in the noise region.