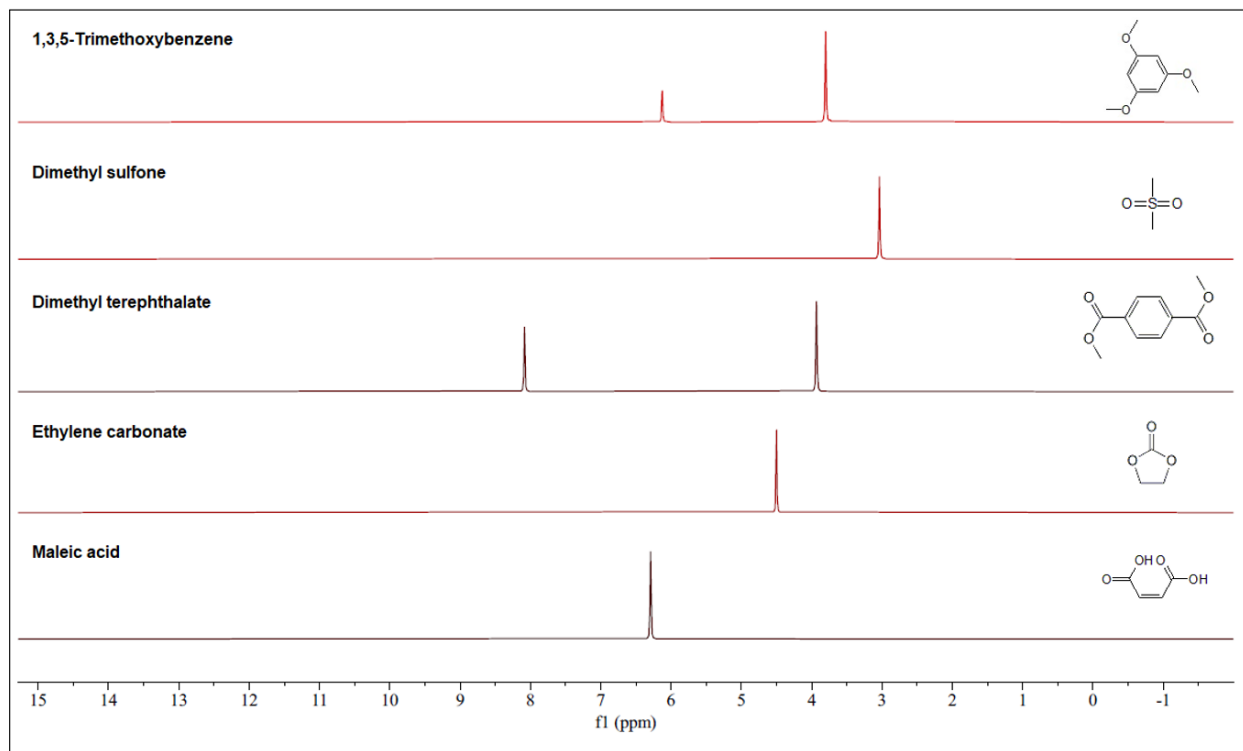


Overview of qNMR Standard Certified Reference Materials



1,3,5-Trimethoxybenzene

Article number: 690321

Solvent	Solubility (mg/ml)	Chemical shift (ppm)*	T1 relaxation time (s)
CDCl ₃	250	6,1	2,9
		3,7	1,6
DMSO-d ₆	250	6,1	2,4
		3,7	1,2
CD ₃ OD	250	6,1	3,1
		3,7	1,9
CD ₃ CN	250	6,1	3,4
		3,7	2,0
D ₂ O	-		

*¹H-NMR (δ: 0 ppm, TMS, 26°C)

Solubility tests were performed at room temperature with commercially available NMR solvents.

Tests were performed with up to 250 mg/ml. T1 relaxation times were recorded for the single CRM solution (at 26°C). In mixtures, it is recommended to check the T1 delay prior to the qNMR experiment. Chemical shifts and T1 relaxation times were recorded on a Magritek 60 MHz spectrometer.

Dimethyl sulfone

Article number: 691165

Solvent	Solubility (mg/ml)	Chemical shift (ppm)*	T1 relaxation time (s)
CDCl ₃	80	3,0	2,8
DMSO-d ₆	250	3,0	2,3
CD ₃ OD	50	3,0	3,4
CD ₃ CN	250	2,9	3,6
D ₂ O	250	2,9	5,0

*1H-NMR (δ : 0 ppm, TMS, 26°C)

Solubility tests were performed at room temperature with commercially available NMR solvents.

Tests were performed with up to 250 mg/ml. T1 relaxation times were recorded for the single CRM solution (at 26°C). In mixtures, it is recommended to check the T1 delay prior to the qNMR experiment. Chemical shifts and T1 relaxation times were recorded on a Magritek 60 MHz spectrometer.

Dimethyl terephthalate

Article number: 691155

Solvent	Solubility (mg/ml)	Chemical shift (ppm)*	T1 relaxation time (s)
CDCl ₃	160	8,1 3,9	3,2 1,5
DMSO-d ₆	14	8,1 3,9	2,4 1,1
CD ₃ OD	4	8,1 4,8	3,0 2,0
CD ₃ CN	20	8,1 3,9	3,7 2,4
D ₂ O	-	-	-

*1H-NMR (δ : 0 ppm, TMS, 26°C)

Solubility tests were performed at room temperature with commercially available NMR solvents.

Tests were performed with up to 250 mg/ml. T1 relaxation times were recorded for the single CRM solution (at 26°C). In mixtures, it is recommended to check the T1 delay prior to the qNMR experiment. Chemical shifts and T1 relaxation times were recorded on a Magritek 60 MHz spectrometer.

Ethylene carbonate

Article number: 691573

Solvent	Solubility (mg/ml)	Chemical shift (ppm)*	T1 relaxation time (s)
CDCl ₃	255	4,5	3,8
DMSO-d ₆	255	4,5	4,2
CD ₃ OD	245	4,5	3,8
CD ₃ CN	250	4,5	4,6
D ₂ O	250		

*¹H-NMR (δ: 0 ppm, TMS, 26°C)

Solubility tests were performed at room temperature with commercially available NMR solvents.

Tests were performed with up to 255 mg/ml. T1 relaxation times were recorded for the single CRM solution (at 26°C). In mixtures, it is recommended to check the T1 delay prior to the qNMR experiment. Chemical shifts and T1 relaxation times were recorded on a Magritek 60 MHz spectrometer.

Maleic acid

Article number: 691772

Solvent	Solubility (mg/ml)	Chemical shift (ppm)*	T1 relaxation time (s)
CDCl ₃	-		
DMSO-d ₆	250	6,3	1,2
CD ₃ OD	10	6,3	2,9
CD ₃ CN	20	6,4	3,8
D ₂ O	250	6,4	3,8

*¹H-NMR (δ: 0 ppm, TMS, 26°C)

Solubility tests were performed at room temperature with commercially available NMR solvents.

Tests were performed with up to 250 mg/ml. T1 relaxation times were recorded for the single CRM solution (at 26°C). In mixtures, it is recommended to check the T1 delay prior to the qNMR experiment. Chemical shifts and T1 relaxation times were recorded on a Magritek 60 MHz spectrometer.

Version	Reason for Change	Date
1	Initial Version	11 Mar 2024