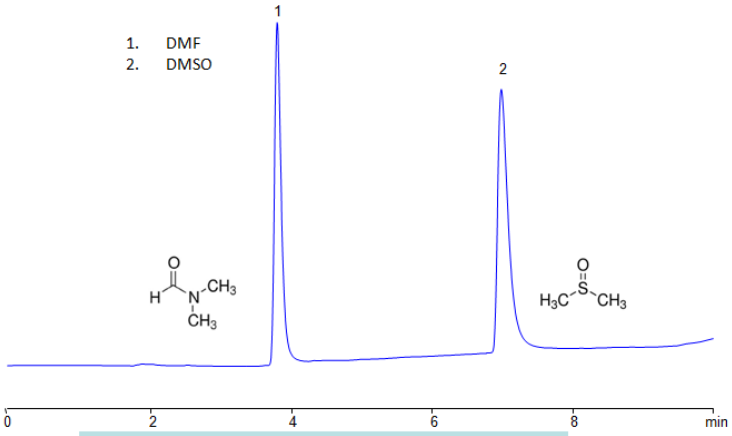
HPLC Separation of Mixture of DMF and DMSO



Column:	**SHARC 1**
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	Gradient MeCN / MeOH

Time, min	%MeCN	%MeOH
0.00	98	2
10.00	85	15

Flow rate:	1 mL/min
UV detection:	220 nm
Injection volume:	1 µL
Sample:	2 mg/mL of each compound in MeCN

High Performance Liquid Chromatography (HPLC) Method for Analysis of DMF (Dimethylformamide) , DMSO (Dimethyl sulfoxide) .

Dimethylformamide, DMF, is primarily used as an organic solvent and is miscible with water and most other organic liquids. Dimethyl sulfoxide (DMSO) is also a solvent. It can dissolve both polar and nonpolar compounds and is miscible with water and other organic liquids. Both compounds can be retained and separated using anhydrous (water-free) conditions using HPLC by SHARC1column, which uses hydrogen-bonding as a separation mechanism. The method uses a gradient of acetonitrile (ACN) and methanol (MeOH) mobile phase without the need for a buffer. UV detection used at 220 nm.

Method Parameters

Column	SHARC1, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	Gradient MeCN – 98-85%, 10 min
Buffer	No
Flow Rate	1.0 mL/min
Detection	UV, 220 nm

Quelle: https://sielc.com/hplc-separation-of-mixture-of-dmf-and-dmso