

CERTIFIED  
REFERENCE  
MATERIALS



## ORGANIC

SPEX CertiPrep is the industry leader for over 55 years in the CRM marketplace meeting the needs of laboratories worldwide with innovation and research.



# USP <467> RESIDUAL SOLVENTS

The USP general chapter <467> Residual Solvents is a method widely used for identifying and quantifying residual solvents when there is no information available on what solvents are likely to be present. USP <467> is divided into two separate sections based upon sample solubility: water soluble and water insoluble articles.

As required by the analytical procedure given in USP <467> for identifying and quantifying residual solvents in drug substances, drug products and excipients, SPEX CertiPrep now offers 35 analytes in Dimethyl Sulfoxide for Class 1, Class 2 and Class 3 solvents. Our products are manufactured and double checked by our QC department to validate the certificate of analysis which accompanies each product.

Residual solvents in pharmaceuticals are trace level impurities of volatile organic compounds in final products or excipients. In general, residual solvents originate from manufacturing processes related to the preparation of drug products. They can also form during product packaging and storage.

### ■ Features of SPEX CertiPrep CRMs:

- Over 3,000 single-component standards available.
- Wide selection of stock multi-component standards available.
- Concentration of components guaranteed.
- Stability of each standard guaranteed.
- Custom packaging readily available.
- Custom blends manufactured upon request, based on your individual needs.
- Up to 68 elemental impurities reported on our Inorganic Certificate of Analysis.
- Uncertainty of standard is reported on our Organic and Inorganic Certificates of Analysis.
- Weights used are traceable to NIST.
- Manufactured by experienced chemists to ensure the highest quality.

### ■ SPEX CertiPrep's USP <467> Residual Solvents are designed for use with:

- GC (FID, ECD, PID, TCD)
- GC/MS
- LC
- LC/MS



### ■ UL and A2LA Stamp of Approval

- Quality system complies with ISO 9001:2008 — Registered with UL.
- Standards manufactured to meet the requirements of ISO 17025:2005 and ISO Guide 34-2009 — Accredited by A2LA.

**SPEX CertiPrep** 

Inorganic & Organic Certified Reference Materials

# USP <467> Residual Solvents

## USP <467> Residual Solvent Singles

Volume: 1 mL Matrix: Dimethyl Sulfoxide

Part #	Compound	CAS #	Conc. (µg/mL)
USP-S1015-DMSO	Cyclohexane	110-82-7	19400
USP-S1380-DMSO	1,2-Dichloroethane	107-06-2	25000
USP-S1390-DMSO	1,1-Dichloroethene	75-35-4	40000
USP-S1394-DMSO	cis-1,2-Dichloroethene	156-59-2	4670
USP-S1400-DMSO	trans-1,2-Dichloroethene	156-60-5	4670
USP-S145-DMSO	Acetonitrile	75-05-8	2050
USP-S1572-DMSO	1,2-Dimethoxyethane	110-71-4	500
USP-S1597-DMSO	N,N-Dimethylacetamide	127-19-5	5450
USP-S1715-DMSO	1,4-Dioxane	123-91-1	1900
USP-S1910-DMSO	2-Ethoxyethanol	110-80-5	800
USP-S1940-DMSO	Ethylbenzene	100-41-4	1840
USP-S1952-DMSO	Ethylene Glycol	107-21-1	3100
USP-S2062-DMSO	Formamide	75-12-7	1100
USP-S2480-DMSO	Methylene Chloride	75-09-2	3000
USP-S2590-DMSO	1-Methyl-2-pyrrolidinone	872-50-4	2650
USP-S2722-DMSO	Nitromethane	75-52-5	250
USP-S3240-DMSO	Pyridine	110-86-1	1000
USP-S3460-DMSO	Tetrahydrofuran	109-99-9	3600
USP-S3464-DMSO	1,2,3,4-Tetrahydronaphthalene	119-64-2	500
USP-S3505-DMSO	Toluene	108-88-3	4450
USP-S3605-DMSO	1,1,1-Trichloroethane	71-55-6	50000
USP-S3615-DMSO	Trichloroethene	79-01-6	400
USP-S3830-DMSO	m-Xylene	108-38-3	6510
USP-S3835-DMSO	o-Xylene	95-47-6	970
USP-S3840-DMSO	p-Xylene	106-42-3	1520
USP-S405-DMSO	Benzene	71-43-2	10000
USP-S750-DMSO	Carbon Tetrachloride	56-23-5	20000
USP-S810-DMSO	Chlorobenzene	108-90-7	1800
USP-S865-DMSO	Chloroform	67-66-3	300

## USP <467> Residual Solvent Mixes

Volume: 1 mL Matrix: Dimethyl Sulfoxide

Part #	Compound
USP-RS-C1	5 Organic Volatile Impurities; Class 1 Solvents
USP-RS-C2A	15 Organic Volatile Impurities; Class 2 Solvents
USP-RS-C2B	8 Organic Volatile Impurities; Class 2 Solvents
USP-RS-C2C	8 Organic Volatile Impurities; Class 2 Solvents
USP-RS-C3A	25 Organic Volatile Impurities; Class 3 Solvents
USP-RS-C3B	2 Organic Volatile Impurities; Class 3 Solvents

