Drinking Water ASTM Methods

NEW

ASTM has developed several LC/tandem mass spectrometry drinking water methods in partnership with the EPA. Each method is described below with the appropriate AccuStandard product listing.

- **D7598 Analysis for Thiodiglycol (LC/MS/MS)**
- **D7599 Analysis for Ethanolamines (LC/MS/MS)**
- **D7600 Analysis for Carbamates (LC/MS/MS)**
- **D7645 Analysis for Carbamates (LC/MS/MS)**

D7598 Analysis for Thiodiglycol in Drinking Water (LC/MS/MS)

Method D7598 applies to Thiodiglycol, a compound used in the manufacture of chemical weapons, insecticides, inks, lubricants and pharmaceutical products. The Method has been designed for drinking and surface water analysis, and includes the target compound and surrogate standard.

ASTM Thiodiglycol Standard

D-7598 **1 mL**

4.0 mg/mL in MeOH

Thiodiglycol

ASTM Thiodiglycol Surrogate Standard

D-7598-SS **1 mL**

4.0 mg/mL in MeOH

3,3'-Thiodipropanol

D7599 Analysis for Ethanolamines in Drinking Water (LC/MS/MS)

ASTM Method D7599 describes the qualitative and quantitative analysis of ethanolamine compounds - Diethanolamine, Triethanolamine, N-methyldiethanolamine and N-ethyldiethanolamine in drinking and surface waters. These compounds are listed as Schedule 3 chemicals under the Chemical Weapons Convention due to their toxicity and other properties that could potentially render them components of chemical weapons. In industry, these chemicals have a broad range of applications including the production of adhesives, detergents, inks, pesticides and pharmaceuticals.

ASTM Ethanolamine Standard

D-7599 **1 mL**

50 µg/mL each in MeOH 5 comps.

Diethanolamine
Triethanolamine
N-Methyldiethanolamine
N-Ethyldiethanolamine
Diethanolamine-d_8

ASTM Ethanolamine Surrogate Standard

D-7599-SS **1 mL**

200 µg/mL in MeOH

Diethanolamine-d_8

D7600 and D7645 Carbamate Drinking Water Methods

ASTM Methods D7600 and D7645 apply to the analysis of carbamate pesticides in drinking and surface waters. The biological affect and residual risk of these compounds is on the nervous system through enzyme inhibition. However, residual levels of these compounds in drinking water are unlikely to cause a cumulative effect in most aquifers.

D7600 Analysis for Carbamates in Drinking Water (LC/MS/MS)

ASTM Carbamate Standard

D-7600 **1 mL**

At stated conc. (µg/mL) in MeOH 5 comps.

Ardicarb	200
Carbofuran	200
Oxamyl	200
Methomyl	200
BDMC (4-Bromo-3,5-dimethylphenyl-N-methyl carbamate)	400

ASTM Carbamate Surrogate Standard

D-7600-SS **1 mL**

400 µg/mL in MeOH

BDMC (4-Bromo-3,5-dimethylphenyl-N-methyl carbamate)

Carbamate standard solutions in concentrations designed for rapid sample analysis.

D7645 Analysis for Carbamates in Drinking Water (LC/MS/MS)

ASTM Carbamate Standard

D-7645 **1 mL**

100 µg/mL each in MeOH 8 comps.

Ardicarb
Aldicarb sulfone
Aldicarb sulfoxide
Carbofuran
Oxamyl
Methomyl
Thiofanox
Carbofuran-d_3

ASTM Carbamate Matrix Spike Standard

D-7645-MS **1 mL**

50 µg/mL each in MeOH 7 comps.

Ardicarb
Aldicarb sulfone
Aldicarb sulfoxide
Carbofuran
Oxamyl
Methomyl
Thiofanox

ASTM Carbamate Surrogate Standard

D-7645-SS **1 mL**

D-7645-SS-PAK **5 x 1 mL**

100 µg/mL in MeOH

Carbofuran-d_3