## Specpure® Environmental Standards



Alfa Aesar is pleased to offer a full line of environmental standards are for use with various EPA methods.

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Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

### CLP Protocal LabPak□ for ICP Analysis, Specpure®



This LabPak<sup>™</sup> comes with all the necessary standard concentrates needed for the day to day operations to complete the EPA established CLP Protocol requirements. Minimal mixing and dilution of the standard concentrates make it easy by saving you time and money in preparing all the necessary CLP Protocol Standards. This LabPak<sup>™</sup> contains the following CLP Protocol Test Kits for analysis by ICP:

#### **CLP Protocol Test Kit**

Instrument Calibration (ICAL) Standards Kit (35417)

Initial Calibration Verification (ICV) Standards Kit (35418)

Continuing Calibration Verification (CCV) Standards Kit (35419)

Contract Required Detection Limits (CRDL) Standard (35420)

Interference Check Standard A (ICS-A) Solution (35256) - (2 each)

Interference Check Standard AB-1 (ICS-AB1) Solution (35421)

Interference Check Standard AB-2 (ICS-AB2) Solution (41330)

Water Spiking Standard A (WSS-A) Solution (35422)

Water Spiking Standard B (WSS-B) Solution (41331)

Soil Spiking Standard A (SSS-A) Solution (35423)

Soil Spiking Standard B (SSS-B) Solution (41332)

Laboratory Control Sample (LCS) Standards Kit (35424)

Initial Calibration Blank/Continuing Calibration Blank 4 (ICB/CCB) Standards Kit (35259) - (4 each)

# Continuing Calibration Verification (CCV) Standards Kit, Specpure®



The CCV Standards Kit comes complete with an A & B standard concentrate solution. Concentrations required by the CLP Protocol are obtained by diluting 1ml each of the A & B concentrates to 100ml.

35419 Continuing Calibration Verification (CCV) Standards Kit, Specpure®

## Contract Required Detaction Limits (CRDL) Standard, **Specpure**®



#### Introduction

CLP Solution Standards are specifically designed for EPA certified environmental labs using ICP analysis in Superfund work. These products provide a virtually error-free method for preparing the required standards that save you time in the process.

#### Simple and Easy to Use

Alfa Aesar's Specpure® CLP Solution Standards are a collection of individually prepared standards for EPA established CLP protocol requirements.

#### **Cost Effective**

Alfa Aesar CLP Standards deliver more for your money. Combine this fact with their overall ease-of-use, plus reduced repeat analysis, and it's easy to see how you can save both time and money.

#### **Highest Quality Materials**

As with all Alta Aesar Specpure® grade products, these CLP standards are produced using the highest purity starting materials available. All standards are made from the same starting material.

Additionally, we use only high-purity water passing 18MΩ/cm2 resistivity and high purity distilled acids that are analyzed and certified to meet our required impurity levels.

Our attention to detail is evident in other important precautions as well. Container materials are selected for inertness and compatibility with specific solutions, and all containers are preleached in 50% HNO<sub>3</sub> (followed by 50% HCI for HCI matrix solutions) for one week and triple rinsed in highpurity water.

#### Alfa Aesar Quality

Alta Aesar has taken great care in preparing these environmental standards. Our careful preparation and attention to detail will deliver you high-quality, time-saving and cost-effective products that help boost productivity and accuracy.

Each Alta Aesar Specpure® solution is shipped with a detailed certificate of analysis and individual expiration date stickers.

## Initial Calibration Blank/Continuing Calibration Blank (ICB/CCB) Standards Kit, Specpure®



#### Introduction

CLP Solution Standards are specifically designed for EPA certified environmental labs using ICP analysis in Superfund work. These products provide a virtually error-free method for preparing the required standards that save you time in the process.

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#### **Highest Quality Materials**

As with all Alta Aesar Specpure® grade products, these CLP standards are produced using the highest purity starting materials available. All standards are made from the same starting material.

Additionally, we use only high-purity water passing  $18M\Omega/cm2$  resistivity and high purity distilled acids that are analyzed and certified to meet our required impurity levels.

Our attention to detail is evident in other important precautions as well. Container materials are selected for inertness and compatibility with specific solutions, and all containers are preleached in 50% HNO<sub>3</sub> (followed by 50% HCI for HCI matrix solutions) for one week and triple rinsed in highpurity water.

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# Initial Calibration Verification (ICV) Standards Kit, Specpure®



The ICV Standards Kit comes complete with an A & B standard concentrate solution. Concentrations required by the CLP Protocol are obtained by diluting 1ml each of the A & B concentrates to 100ml. These concentrates are made from independent lots of raw materials.

35418

Initial Calibration Verification(ICV) Standards Kit, Specpure®

# Instrument Calibration (ICAL) Standards Kit, Specpure®



The ICAL Standards Kit comes complete with A & B standard concentrate solutions. Concentrations required by the CLP Protocol are obtained by diluting 1ml each of the A & B concentrates to 100ml.

35417	Instrument Calibration(ICAL) Standards Kit, Specpure®
44855	Instrument Calibration(ICAL) Standard, Solution A, Specpure®
44856	Instrument Calibration(ICAL) Standard, Solution B, Specpure®

## Interference Check Standard for ILM04.0, Specpure®



For ILM04.0, Interference Check Sample Solution AB is obtained by diluting 10ml of ICS-A and 1ml of ICS-AB concentrates to 100ml.

41730

Interference Check Standard AB(ICS-AB) Solution, Specpure®

## Interference Check Standards, Specpure®



The concentration required by the CLP protocol for Interference Check Standard A is obtained by diluting ICS-A ten-fold. Interference Check Standard AB is obtained by diluting 1ml of ICS-AB1, 1ml of ICS-AB2, and 10ml of ICS-A concentrates to 100ml.

35421	Interference Check Standard AB-1(ICS-AB1) Solution, Specpure®
41330	Interference Check Standard AB-2(ICS-AB2) Solution, Specpure®
35256	Interference Check Standard A(ICS-A) Solution, Specpure®

## Spiking Standards Solutions, Specpure®



The Water Spiking Standards A and B are typically used together. To prepare spiked samples, add 1ml of each solution to each soil sample.

35422	Water Spiking Standard A (WSS-A) Solution, Specpure®
41331	Water Spiking Standard B (WSS-B) Solution, Specpure®

## Specpure® ICP-MS General Standards



Alfa Aesar is proud to offer several common standards for use with ICP-MS analysis.

We offer the following:

Specpure® ICP-MS General Standards. Specifically, we offer an ICP-MS internal standard solution and an ICP-MS tuning standard solution for HP®

12   12   12   12   12   12   12   12	44651	ICP-MS Internal Standard solution, Specpure®
(F) (F) (F)	42586	ICP-MS Tuning Standard solution for HP®, Specpure®

## Specpure® ICP-MS Standards for Method 200.8



Alfa Aesar is proud to offer several common standards for use with ICP-MS analysis.

We offer the following:

Specpure® ICP-MS Standards for Method 200.8 These standards are applicable for the determination of 21 elements as dissolved elements in ground waters, surface waters, and drinking water, and total recoverable elements in these waters as well as wastewaters, sludges, and soils samples.

	44789	ICP-MS Internal Standard solution for 200.8 & CLP ILM05.2,Specpure®
	45551	ICP-MS QC Standard solution 20, Specpure®
	40485	ICP-MS Stock Standard solution A for 200.8, Rev. 4.4, Specpure®
	42596	ICP-MS Stock Standard solution A for 200.8, Rev. 5.4, Specpure®
9. 2. 3. 5.	40486	ICP-MS Stock Standard solution B for 200.8, Specpure®
	45641	ICP-MS Tuning Standard solution for 200.8, Specpure®

## Specpure® ICP-MS Standards for Methods 6020 and 6020 CLP-M



Alfa Aesar is proud to offer several common standards for use with ICP-MS analysis.

#### We offer the following:

Specpure® ICP-MS Standards for Methods 6020 and 6020 CLP-M. These standards are applicable for the determination of sub- $\mu$ g/L concentrations of a large number of elements in water samples and in waste extracts or digests.

42650	ICP-MS Analytes B for 6020 CLP-M, Specpure®
42602	ICP-MS Calibration Standard solution for 6020 CLP-M, Specpure®
44935	ICP-MS General Memory & Interference Check Sample Mix for 6020, Specpure®
44713	ICP-MS Interference Check Standard solution B for 6020, Specpure®
47135	ICP-MS Interferents A for 6020A ICS, Specpure®
43161	ICP-MS Internal Standard for 6020, Specpure®
40488	ICP-MS Memory Check Standard solution B for 6020 CLP-M, Specpure®
42604	ICP-MS Soil Spike Standard solution for 6020 CLP-M, Specpure®
40482	ICP-MS Tuning Standard solution for 6020 CLP-M, Specpure®
44539	ICP-MS Water Spike Standard solution for 6020 CLP-M, Specpure®

## Specpure® Check Standards



The following environmental standards are for use with EPA Method 200.7 and can be used for EPA Method 6010A and Standard Method 3120. Please inquire for Interference Check Standard Solutions, Mixed Calibration Standard Solutions, Primary Drinking Water Standard Solutions and Secondary Drinking Water Standard Solutions.

39146	Multi-Element QC-19 Check Standard Solution, Specpure®
41328	Multi-Element QC-21 Check Standard Solution, Specpure®
39145	Multi-Element QC-7 Check Standard Solution, Specpure®

# Specpure® Ground & Wastewater Pollution Standards



For use with US EPA methods manual 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes": Trace metals 21I, 21II, and 21III methods.

36740	Ground & Waste Water Pollution Standard Solution 1, Specpure®
36745	Ground & Waste Water Pollution Standard Solution 2, Specpure®
36750	Ground & Waste Water Pollution Standard Solution 3, Specpure®
42579	Ground & Waste Water Pollution Standard Solution 4, Specpure®
42580	Ground & Waste Water Pollution Standard Solution 5, Specpure®

### Specpure® TCLP Standards



For use in Toxicity Characteristics Leachate Procedure Method 1311.

36743	TCLP Standard Solution 1, Specpure®
36748	TCLP Standard Solution 2, Specpure®, Hg 20μg/ml

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