

## **XRF Reference Material Preparation Kit**

Art. ID	CX-6700
Unit	kit
Deliverydetails	No Dangerous Good /not restricted

### **Description**

The unique assemblage of assorted compounds contains 50 elements to prepare - in-lab - reference materials for single or multiple elemental analyses. The method involves gravimetric dilution of a compound with a diluent, such as SpectroBlend® 44µ Powder, Cat. No: 660, to develop a weight percent concentration value of the element of interest. Two sample vials of SpectroBlend® Powder each containing 6 g are included with each Kit. Successive dilution preparations serve in establishing a linear correlation of the concentrations and analyte-line intensities against which the unknown sample is referred to and assigned a concentration value. Although this methodology suffices in many instances, it is not intended as a replacement for standardization with certified materials of similar matrices for exacting results. It serves its application in situations where time, primary standard availability and frequency of sample submittals represent uncertainties and advance preparedness is a current option with a SpectroStandard® Reference Standard Kit. Instructions are included for dilution of each compound to a desired element concentration followed by thorough blending with the diluent to ensure homogeneity. After blending, the diluted mixture is usable in loose powder form by transferring it to a sample cup with a thin-film attached or in a tapered pellet cup for briquette formation. Reference material briquettes have additional applications during initial instrument installations, for optimizing and monitoring instrument performance and drift. The reference materials are prepared from finely powdered substances, mostly oxides, in purities of 99,9 to 99,99%. One gram of each of the substances is contained in a labeled glass vial with a polycone screw cap, organized and protected in a polyfoam block and packaged together with two starter sample vials of SpectroBlend® Powder in a plastic case with a locking lid. The inside of the lid contains a label identifying the contents of each vial and alpha-numerically keyed to the vial positions for easy retrieval. Note: Chemplex Industries, Inc. reserves the right to substitute compounds and purities depending upon availability without advance notifications. This product is intended for relative comparison studies and not suggested for use as primary standards. The judicious use and applications of this product resides solely with the purchaser and/or user. Table of Minerals Content:

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	Ag - Ag2O					
	Al - Al2O3					
	As - As2O3					
	Ba - BaHPO4					
	Be - BeO					
	Bi - Bi2O3					
	Ca - CaO					
	Cd - CdO					
	Ce - CeO2					
	Co - Co3O4					
	Cr - Cr2O3					
	Cs - CsNO3					
	Cu - CuO					
	Fe - Fe2O3					
	Ga - Ga2O3					

Ge - GeO <sub>2</sub>
Gd - Gd <sub>2</sub> O <sub>3</sub>
Hf - HfO <sub>2</sub>
Hg - HgO
In - In <sub>2</sub> O <sub>3</sub>
I - I <sub>2</sub> O <sub>5</sub>
K - K <sub>2</sub> CO <sub>3</sub>
La - La <sub>2</sub> O <sub>3</sub>
F - LiF
Mg - MgO
Mn - MnO <sub>2</sub>
Mo - MoO <sub>3</sub>
Na - NaCl
Nb - Nb <sub>2</sub> O <sub>5</sub>
P - NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>
Sc - Sc <sub>2</sub> O <sub>3</sub>
Pb - PbO
Rb - RbCl
S
Sb - Sb <sub>2</sub> O <sub>3</sub>
Ni - NiO
Se - SeO <sub>2</sub>
Si - SiO <sub>2</sub>
Sn - SnO <sub>2</sub>
Sr - SrCO <sub>3</sub>
Ta - Ta <sub>2</sub> O <sub>3</sub>
Te - TeO <sub>2</sub>
Th - ThO <sub>2</sub>
Ti - TiO <sub>2</sub>
Tl - Tl <sub>2</sub> O <sub>3</sub>
Tm - Tm <sub>2</sub> O <sub>3</sub>
V - V <sub>2</sub> O <sub>5</sub>