

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
Wear Metal Standards for ICP, RDE and Other Techniques					
TW21-110G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 10µg/g	100g	
TW21-120G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 10µg/g	200g	
TW21-310G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 30µg/g	100g	
TW21-320G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 30µg/g	200g	
TW21-510G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 50µg/g	100g	
TW21-520G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 50µg/g	200g	
TW21-1010G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 100µg/g	100g	
TW21-1020G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 100µg/g	200g	
TW21-3010G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 300µg/g	100g	
TW21-3020G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 300µg/g	200g	
TW21-5010G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 500µg/g	100g	
TW21-5020G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 500µg/g	200g	
TW21-9010G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 900µg/g	100g	
TW21-9020G	V21 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Zn @ 900µg/g	200g	
TWK21-110G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 10µg/g	100g	
TWK21-120G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 10µg/g	200g	
TWK21-310G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 30µg/g	100g	
TWK21-320G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 30µg/g	200g	
TWK21-510G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 50µg/g	100g	
TWK21-520G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 50µg/g	200g	
TWK21-1010G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 100µg/g	100g	

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TWK21-1020G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 100µg/g	200g	
TWK21-3010G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 300µg/g	100g	
TWK21-3020G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 300µg/g	200g	
TWK21-5010G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 500µg/g	100g	
TWK21-5020G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 500µg/g	200g	
TWK21-9010G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 900µg/g	100g	
TWK21-9020G	V21+K Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Si, Sn, Ti, V, Z @ 900µg/g	200g	
TW23-110G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 10µg/g	100g	
TW23-0120G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 10µg/g	200g	
TW23-310G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 30µg/g	100g	
TW23-320G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 30µg/g	200g	
TW23-510G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 50µg/g	100g	
TW23-520G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 50µg/g	200g	
TW23-1010G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 100µg/g	100g	
TW23-1020G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 100µg/g	200g	
TW23-3010G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 300µg/g	100g	
TW23-3020G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 300µg/g	200g	
TW23-5010G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 500µg/g	100g	
TW23-5020G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 500µg/g	200g	
TW23-9010G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 900µg/g	100g	
TW23-9020G	V23 Wear Metal Standards	Hydrocarbon Oil	Ag, Al, B, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn @ 900µg/g	200g	

Internal Standards for Wear Metal Analysis by ICP

TISCO-610G	Cobalt (Co) Internal Standard, 6 wt%	Mineral Spirits	Co @ 6 wt%	100g	Y
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Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TISCO-620G	Cobalt (Co) Internal Standard, 6 wt%	Mineral Spirits	Co @ 6 wt%	200g	Y

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TISCO-640G	Cobalt (Co) Internal Standard, 6 wt%	Mineral Spirits	Co @ 6 wt%	400g	Y
TISCO-5M20G	Cobalt (Co) Internal Standard, 5000µg/g	Hydrocarbon Oil	Co @ 5000µg/g	200g	
TISCO-5M80G	Cobalt (Co) Internal Standard, 5000µg/g	Hydrocarbon Oil	Co @ 5000µg/g	800g	
TISCE-5M20G	Cerium (Ce) Internal Standard - 5000µg/g	Hydrocarbon Oil	Ce @ 5000µg/g	200g	
TISLA-5M20G	Lanthanum (La) Internal Standard - 5000µg/g	Hydrocarbon Oil	La @ 5000µg/g	200g	
TISOY-5M40G	Yttrium (Y) Internal Standard - 5000µg/g	Hydrocarbon Oil	Y @ 5000µg/g	400g	
TISOYD-10G	Yttrium (Y) Internal Standard - 2 wt%	Hydrocarbon Oil	Y @ 2 wt%	100g	
TISOYD-20G	Yttrium (Y) Internal Standard - 2 wt%	Hydrocarbon Oil	Y @ 2 wt%	200g	

Metal Additives Standards for ICP, RDE and Other Techniques

TMA3-M10G	Metal Additives Standard MA3: Ca @ 5000µg/g; P, Zn @ 1600µg/g	Hydrocarbon Oil	Ca @ 5000µg/g; P, Zn @ 1600µg/g	100g
TMA3-M20G	Metal Additives Standard MA3: Ca @ 5000µg/g; P, Zn @ 1600µg/g	Hydrocarbon Oil	Ca @ 5000µg/g; P, Zn @ 1600µg/g	200g
TMA4-M10G	Metal Additives Standard MA4: Ca @ 5000µg/g; Mg, P, Zn @ 1600µg/g	Hydrocarbon Oil	Ca @ 5000µg/g; Mg, P, Zn @ 1600µg/g	100g
TMA4-M20G	Metal Additives Standard MA4: Ca @ 5000µg/g; Mg, P, Zn @ 1600µg/g	Hydrocarbon Oil	Ca @ 5000µg/g; Mg, P, Zn @ 1600µg/g	200g
TMA5-9010G	Metal Additives Standard MA5: Ba, Ca, Mg, P, Zn @ 900µg/g	Hydrocarbon Oil	Ba, Ca, Mg, P, Zn @ 900µg/g	100g
TMA5-9020G	Metal Additives Standard MA5: Ba, Ca, Mg, P, Zn @ 900µg/g	Hydrocarbon Oil	Ba, Ca, Mg, P, Zn @ 900µg/g	200g
TMA5-1M10G	Metal Additives Standard MA5: Ba, Ca, Mg, P, Zn @ 1000µg/g	Hydrocarbon Oil	Ba, Ca, Mg, P, Zn @ 1000µg/g	100g
TMA5-1M20G	Metal Additives Standard MA5: Ba, Ca, Mg, P, Zn @ 1000µg/g	Hydrocarbon Oil	Ba, Ca, Mg, P, Zn @ 1000µg/g	200g
TMA5-3M10G	Metal Additives Standard MA5: Ba, Ca, Mg, P, Zn @ 3000µg/g	Hydrocarbon Oil	Ba, Ca, Mg, P, Zn @ 3000µg/g	100g
TMA5-3M20G	Metal Additives Standard MA5: Ba, Ca, Mg, P, Zn @ 3000µg/g	Hydrocarbon Oil	Ba, Ca, Mg, P, Zn @ 3000µg/g	200g
TMA5-5M10G	Metal Additives Standard MA5: Ba, Ca, Mg, P, Zn @ 5000µg/g	Hydrocarbon Oil	Ba, Ca, Mg, P, Zn @ 5000µg/g	100g
TMA5-5M20G	Metal Additives Standard MA5: Ba, Ca, Mg, P, Zn @ 5000µg/g	Hydrocarbon Oil	Ba, Ca, Mg, P, Zn @ 5000µg/g	200g
TMA6-9010G	Metal Additives Standard MA6: B, Ba, Ca, Mg, P, Zn @ 900µg/g	Hydrocarbon Oil	B, Ba, Ca, Mg, P, Zn @ 900µg/g	100g
TMA6-9020G	Metal Additives Standard MA6: B, Ba, Ca, Mg, P, Zn @ 900µg/g	Hydrocarbon Oil	B, Ba, Ca, Mg, P, Zn @ 900µg/g	200g

Matrix Oils and Solvents

TO-7550M	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis	75 cSt Hydrocarbon Oil	S @ <1ppm	500mL
TO-751N	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis	75 cSt Hydrocarbon Oil	S @ <1ppm	1 Gal.
TO-2050M	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis	20 cSt Hydrocarbon Oil	S @ <1ppm	500mL
TO201N	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis	20 cSt Hydrocarbon Oil	S @ <1ppm	1 Gal.
TSOL-1N	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis	V-SOLV™ ICP Solvent	S @ <1ppm	1 Gal.
TSOL-4N	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis V-SOLV™ ICP Solvent 4x1 Gal.	75 cSt Hydrocarbon Oil	S @ <1ppm	4 x 1 Gal.
TSOL-5N	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis	V-SOLV™ ICP Solvent	S @ <1ppm	5 Gal.
TKER-50M	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis	Kerosene	S @ <1ppm	500mL
TKER-1N	Solvents for Prep of Working Stds. for Hydrocarbon/Petrochem. Analysis	Kerosene	S @ <1ppm	1 Gal.

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
Stabilizer for Wear Metal Standards					
TSTA-5G	MO Stabilizer to Improve Stability of Mixes or Dilutions	Add to solutions at 0.6 wt%	MO Stabilizer	50g	
Single-Element Metallo-Organic Standards for ICP, RDE and Other Techniques					
TOAL-1M5G	Aluminum conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Al @ 1000µg/g	50g	
TOAL-5M5G	Aluminum conc. 5000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Al @ 5000µg/g	50g	
TOSB-1M5G	Antimony conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Sb @ 1000µg/g	50g	
TOSB-5M5G	Antimony conc. 5000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Sb @ 5000µg/g	50g	
TOAS-1M5G	Arsenic conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	As @ 1000µg/g	50g	
TOBA-1M5G	Barium conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Ba @ 1000µg/g	50g	
TOBA-5M5G	Barium conc. 5000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Ba @ 5000µg/g	50g	
TOBE-1M5G	Beryllium conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Be @ 1000µg/g	50g	
TOBI-1M5G	Bismuth conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Bi @ 1000µg/g	50g	
TOB-1M5G	Boron conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	B @ 1000µg/g	50g	
TOB-5M5G	Boron conc. 5000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	B @ 5000µg/g	50g	
TOCD-1M5G	Cadmium conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Cd @ 1000µg/g	50g	
TOCD-5M5G	Cadmium conc. 5000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Cd @ 5000µg/g	50g	
TOCA-1M5G	Calcium conc. 1000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Ca @ 1000µg/g	50g	
TOCA-5M5G	Calcium conc. 5000µg/g	Hydrocarbon Oil	Ca @ 5000µg/g	50g	
TOCR-1M5G	Chromium conc. 1000µg/g	Hydrocarbon Oil	Cr @ 1000µg/g	50g	
TOCR-5M5G	Chromium conc. 5000µg/g	Hydrocarbon Oil	Cr @ 5000µg/g	50g	
TOCO-1M5G	Cobalt conc. 1000µg/g	Hydrocarbon Oil	Co @ 1000µg/g	50g	
TOCO-5M5G	Cobalt conc. 5000µg/g	Hydrocarbon Oil	Co @ 5000µg/g	50g	
TOCU-1M5G	Copper conc. 1000µg/g	Hydrocarbon Oil	Cu @ 1000µg/g	50g	
TOCU-5M5G	Copper conc. 5000µg/g	Hydrocarbon Oil	Cu @ 5000µg/g	50g	
TOFE-1M5G	Iron conc. 1000µg/g	Hydrocarbon Oil	Fe @ 1000µg/g	50g	
TOFE-5M5G	Iron conc. 5000µg/g	Hydrocarbon Oil	Fe @ 5000µg/g	50g	
TOLA-1M5G	Lanthanum conc. 1000µg/g	Hydrocarbon Oil	La @ 1000µg/g	50g	
TOLA-5M5G	Lanthanum conc. 5000µg/g	Hydrocarbon Oil	La @ 5000µg/g	50g	
TOPB-1M5G	Lead conc. 1000µg/g	Hydrocarbon Oil	Pb @ 1000µg/g	50g	
TOPB-5M5G	Lead conc. 5000µg/g	Hydrocarbon Oil	Pb @ 5000µg/g	50g	
TOLI-1M5G	Lithium conc. 1000µg/g	Hydrocarbon Oil	Li @ 1000µg/g	50g	
TOLI-5M5G	Lithium conc. 5000µg/g	Hydrocarbon Oil	Li @ 5000µg/g	50g	
TOMG-1M5G	Magnesium conc. 1000µg/g	Hydrocarbon Oil	Mg @ 1000µg/g	50g	
TOMG-5M5G	Magnesium conc. 5000µg/g	Hydrocarbon Oil	Mg @ 5000µg/g	50g	
TOMN-1M5G	Manganese conc. 1000µg/g	Hydrocarbon Oil	Mn @ 1000µg/g	50g	
TOMN-5M5G	Manganese conc. 5000µg/g	Hydrocarbon Oil	Mn @ 5000µg/g	50g	
TOHG-1M5G	Mercury conc. 1000µg/g	Hydrocarbon Oil	Hg @ 1000µg/g	50g	
TOMO-1M5G	Molybdenum conc. 1000µg/g	Hydrocarbon Oil	Mo @ 1000µg/g	50g	
TOMO-5M5G	Molybdenum conc. 5000µg/g	Hydrocarbon Oil	Mo @ 5000µg/g	50g	
TONI-1M5G	Nickel conc. 1000µg/g	Hydrocarbon Oil	Ni @ 1000µg/g	50g	
TONI-5M5G	Nickel conc. 5000 µg/g Hydrocarbon Oil	Hydrocarbon Oil	Ni @ 5000µg/g	50g	
TOP-1M5G	Phosphorus conc. 1000µg/g	Hydrocarbon Oil	P @ 1000µg/g	50g	
TOP-5M5G	Phosphorus conc. 5000µg/g	Hydrocarbon Oil	P @ 5000µg/g	50g	
TOK-1M5G	Potassium conc. 1000µg/g	Hydrocarbon Oil	K @ 1000µg/g	50g	
TOK-5M5G	Potassium conc. 5000µg/g	Hydrocarbon Oil	K @ 5000µg/g	50g	
TOSC-1M5G	Scandium conc. 1000µg/g	Hydrocarbon Oil	Sc @ 1000µg/g	50g	
TOSE-1M5G	Selenium conc. 1000 ug/g	Hydrocarbon Oil	Se @ 1000 ug/g	50g	
TOSI-1M5G	Silicon conc. 1000µg/g	Hydrocarbon Oil	Si @ 1000µg/g	50g	
TOSI-5M5G	Silicon conc. 5000µg/g	Hydrocarbon Oil	Si @ 5000µg/g	50g	
TOAG-1M5G	Silver conc. 1000µg/g	Hydrocarbon Oil	Ag @ 1000µg/g	50g	Y

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TOAG-5M5G	Silver conc. 5000µg/g	Hydrocarbon Oil	Ag @ 5000µg/g	50g	Y
TONA-1M5G	Sodium conc. 1000µg/g	Hydrocarbon Oil	Na @ 1000µg/g	50g	
TONA-5M5G	Sodium conc. 5000µg/g	Hydrocarbon Oil	Na @ 5000µg/g	50g	
TOSR-1M5G	Strontium conc. 1000µg/g	Hydrocarbon Oil	Sr @ 1000µg/g	50g	
TOS-1M5G	Sulfur conc. 1000µg/g	Hydrocarbon Oil	S @ 1000µg/g	50g	
TOS-5M5G	Sulfur conc. 5000µg/g	Hydrocarbon Oil	S @ 5000µg/g	50g	
TOSN-1M5G	Tin conc. 1000µg/g	Hydrocarbon Oil	Sn @ 1000µg/g	50g	
TOSN-5M5G	Tin conc. 5000µg/g	Hydrocarbon Oil	Sn @ 5000µg/g	50g	
TOTI-1M5G	Titanium conc. 1000µg/g	Hydrocarbon Oil	Ti @ 1000µg/g	50g	
TOTI-5M5G	Titanium conc. 5000µg/g	Hydrocarbon Oil	Ti @ 5000µg/g	50g	
TOW-1M5G	Tungsten - 1000µg/g	Hydrocarbon Oil	T @ 1000µg/g	50g	
TOW-5M5G	Tungsten - 5000µg/g	Hydrocarbon Oil	T @ 5000µg/g	50g	
TOV-1M5G	Vanadium conc. 1000µg/g	Hydrocarbon Oil	V @ 1000µg/g	50g	
TOV-5M5G	Vanadium conc. 5000µg/g	Hydrocarbon Oil	V @ 5000µg/g	50g	
TOY-1M5G	Yttrium conc. 1000µg/g	Hydrocarbon Oil	Y @ 1000µg/g	50g	
TOY-5M5G	Yttrium conc. 5000µg/g	Hydrocarbon Oil	Y @ 5000µg/g	50g	
TOZN-1M5G	Zinc conc. 1000µg/g	Hydrocarbon Oil	Zn @ 1000µg/g	50g	
TOZN-5M5G	Zinc conc. 5000µg/g	Hydrocarbon Oil	Zn @ 5000µg/g	50g	
TOZR-1M5G	Zirconium conc. 1000µg/g	Hydrocarbon Oil	Zr @ 1000µg/g	50g	
TOZR-5M5G	Zirconium conc. 5000µg/g	Hydrocarbon Oil	Zr @ 5000µg/g	50g	

**D-Series Multi-Element Wear Metal
Standards for Military Applications using RDE**

TD19-B20G	D19-000 Aviation Reference Oil Matrix Blank	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 0µg/g	200g	
TD19-0510G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 5µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 5µg/g	100g	Y
TD19-110G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 10µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 10µg/g	100g	Y
TD19-310G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 30µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 30µg/g	100g	Y
TD19-510G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 50µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 50µg/g	100g	Y
TD19-810G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 80 µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 80 µg/g	100g	Y
TD19-1010G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 100µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 100µg/g	100g	Y
TD19-1210G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 100 µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 100 µg/g	100g	Y
TD19-3010G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 300µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 300µg/g	100g	Y
TD19-5010G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 500µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 500µg/g	100g	Y
TD19-7010G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 700µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 700µg/g	100g	Y
TD19-9010G	D19 Standard: Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 900µg/g	Aviation Reference Oil	Ag, Al, B, Ba, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, Pb, Si, Sn, Ti, V, Zn @ 900µg/g	100g	Y

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TD19-SET	2x D19-000 & D19-100-100G; 1x D19-5-100G, D19-10-100G, D19-30-100G, D19-50-100G, D19-80-100G, D19-120-100G, D19-300-100G, D19-500-100G, D19-700-100G, and D19-900- 100G Aviation Reference Oil 2x200g & 12x100g Miscellaneous UN3082 Class 9	Aviation Reference Oil	SET	12 x 100g	Y

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
Acid Number and Base Number Standards					
TAN-0110	Acid Number (AN) Reference Material, 0.1 mg KOH/g	Hydrocarbon Oil	0.1 mg KOH/g	100g	
TAN-0510	Acid Number (AN) Reference Material, 0.5 mg KOH/g	Hydrocarbon Oil	0.5 mg KOH/g	100g	
TAN-110	Acid Number (AN) Reference Material, 1.0 mg KOH/g	Hydrocarbon Oil	1.0 mg KOH/g	100g	
TAN-1510	Acid Number (AN) Reference Material, 1.5 mg KOH/g	Hydrocarbon Oil	1.5 mg KOH/g	100g	
TAN-25G	Acid Number (AN) Reference Material, 2.0 mg KOH/g	Hydrocarbon Oil	2.0 mg KOH/g	50g	
TAN-35G	Acid Number (AN) Reference Material, 3.0 mg KOH/g	Hydrocarbon Oil	3.0 mg KOH/g	50g	
TBN-65G	Base Number (BN) Reference Material, 6 mg KOH/g	Hydrocarbon Oil	6 mg KOH/g	50g	
TBH-105G	Base Number (BN) Reference Material, 10 mg KOH/g	Hydrocarbon Oil	10 mg KOH/g	50g	
TBH-155G	Base Number (BN) Reference Material, 15 mg KOH/g	Hydrocarbon Oil	15 mg KOH/g	50g	
TBH-305G	Base Number (BN) Reference Material, 30 mg KOH/g	Hydrocarbon Oil	30 mg KOH/g	50g	
TBH-405G	Base Number (BN) Reference Material, 40 mg KOH/g	Hydrocarbon Oil	40 mg KOH/g	50g	
TBH-705G	Base Number (BN) Reference Material, 70 mg KOH/g	Hydrocarbon Oil	70 mg KOH/g	50g	
Fuel Dilution Standards					
TDLF01-10M	Blank for Diesel Fuel Dilution Standards	Hydrocarbon Oil	0% (v/v) Diesel Fuel	100mL	
TDLF01-50M	Blank for Diesel Fuel Dilution Standards	Hydrocarbon Oil	0% (v/v) Diesel Fuel	500mL	Y
TDLF02-10M	2% (v/v) Devolatilized Diesel Fuel	Hydrocarbon Oil	2% (v/v) Diesel Fuel	100mL	
TDLF03-10M	5% (v/v) Devolatilized Diesel Fuel	Hydrocarbon Oil	2% (v/v) Diesel Fuel	100mL	
TDLF04-10M	10% (v/v) Devolatilized Diesel Fuel	Hydrocarbon Oil	10% (v/v) Diesel Fuel	100mL	
TDLG01-10M	Blank for Gas Fuel Dilution Standards	Hydrocarbon Oil	0% (v/v) Gasoline	100mL	
TDLG02-10M	2% (v/v) Devolatilized Gasoline	Hydrocarbon Oil	2% (v/v) Gasoline	100mL	
TDLG03-10M	5% (v/v) Devolatilized Gasoline	Hydrocarbon Oil	5% (v/v) Gasoline	100mL	
TDLG04-10M	10% (v/v) Devolatilized Gasoline	Hydrocarbon Oil	10% (v/v) Gasoline	100mL	
Engine Coolant in Oil Standards					
TEC01-10M	Blank	20 cSt Hydrocarbon Oil	Glycol @ 0µg/g	100mL	
TEC02-10M	Engine Coolant in Oil Standard Glycol @ 100µg/g	20 cSt Hydrocarbon Oil	Glycol @ 100µg/g	100mL	
TEC04-10M	Ethylene Glycol & Propylene Glycol @ 500µg/g	20 cSt Hydrocarbon Oil	Ethylene Glycol & Propylene Glycol @ 500µg/g	100mL	
TEC03-10M	Ethylene Glycol & Propylene Glycol @ 1000µg/g	20 cSt Hydrocarbon Oil	Ethylene Glycol & Propylene Glycol @ 1000µg/g	100mL	
Soot Content Standards					
TSC01-5M	Nominal Soot Content Range (%): Blank	15W40 Diesel Motor Oil	Soot @ 0%	50mL	
TSC02-5M	Nominal Soot Content Range (%): 0.5-2	15W40 Diesel Motor Oil	Soot @ 0.5 - 2%	50mL	
TSC03-5M	Nominal Soot Content Range (%): 2-4	15W40 Diesel Motor Oil	Soot @ 2 - 4%	50mL	
TSC04-5M	Nominal Soot Content Range (%): 4-6	15W40 Diesel Motor Oil	Soot @ 4 - 6%	50mL	
TSC05-5M	Nominal Soot Content Range (%): 6-9	15W40 Diesel Motor Oil	Soot @ 6 - 9%	50mL	
TSC06-5M	Nominal Soot Content Range (%): 9-12	15W40 Diesel Motor Oil	Soot @ 9 - 12%	50mL	
TSC-S65M	Set of all 6 Soot Content Ranges	15W40 Diesel Motor Oil	SET	6x50mL	

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
Crackle Test Reference Standards					
TCT01-10M	Crackle Test Blank	10W30 Motor Oil	Water @ 0%	100mL	
TCT02-10M	Crackle Test, Nominal Water Conc. 0.1%	10W30 Motor Oil	Water @ 0.1%	100mL	
TCT03-10M	Crackle Test, Nominal Water Conc. 0.1%	10W30 Motor Oil	Water @ 0.1%	100mL	
TCT04-10M	Crackle Test, Nominal Water Conc. 0.5%	10W30 Motor Oil	Water @ 0.5%	100mL	
TCT05-10M	Crackle Test, Nominal Water Conc. 1.0%	10W30 Motor Oil	Water @ 1.0%	100mL	
Karl Fischer Titration Certified Reference Standards					
TKF01-10M	Karl Fischer Blank	10W30 Motor Oil	Water @ 0%	100mL	
TKF02-10M	Karl Fischer, Nominal Water Conc. 0.05%	10W30 Motor Oil	Water @ 0.05%	100mL	
TKF03-10M	Karl Fischer, Nominal Water Conc. 0.1%	10W30 Motor Oil	Water @ 0.1%	100mL	
TKF04-10M	Karl Fischer, Nominal Water Conc. 0.5%	10W30 Motor Oil	Water @ 0.5%	100mL	
TKF05-10M	Karl Fischer, Nominal Water Conc. 1.0%	10W30 Motor Oil	Water @ 1.0%	100mL	
Distillation Standards					
TDS01-50M	ASTM D86 Group 1 & 2 Synthetic Distillation Standard	Hydrocarbons	54°C - 187°C	500mL	Y
TDS02-50M	ASTM D86 Group 4 Distillation Standard	Diesel Fuel	193°C - 371°C	500mL	Y
TRGO-10ML	Reference Gas Oil No. 2 for ASTM D2887	Reference Gas Oil	160°C - 385°C	10 x 1mL ampoule	
Single-Element, Sulfur-Free Metallo-Organic Standards for XRF and Other Techniques					
TOSAL-1M05G	Sulfur-Free Aluminium conc. 1000µg/g	Hydrocarbon Oil	Al @ 1000µg/g	50g	
TOSAL-5M05G	Sulfur-Free Aluminium conc. 5000µg/g	Hydrocarbon Oil	Al @ 5000µg/g	50g	
TOSSB-1M05G	Sulfur-Free Antimony conc. 1000µg/g	Hydrocarbon Oil	Sb @ 1000µg/g	50g	
TOSSB-5M05G	Sulfur-Free Antimony conc. 5000µg/g	Hydrocarbon Oil	Sb @ 5000µg/g	50g	
TOSAS-1M05G	Sulfur-Free Arsenic conc. 1000µg/g	Hydrocarbon Oil	As @ 1000µg/g	50g	
TOSBA-1M05G	Sulfur-Free Barium conc. 1000µg/g	Hydrocarbon Oil	Ba @ 1000µg/g	50g	
TOSBA-5M05G	Sulfur-Free Barium conc. 5000µg/g	Hydrocarbon Oil	Ba @ 5000µg/g	50g	
TOSBE-1M05G	Sulfur-Free Beryllium conc. 1000µg/g	Hydrocarbon Oil	Be @ 1000µg/g	50g	
TOSBE-5M05G	Sulfur-Free Beryllium conc. 5000µg/g	Hydrocarbon Oil	Be @ 5000µg/g	50g	
TOSBI-1M05G	Sulfur-Free Bismuth conc. 1000µg/g	Hydrocarbon Oil	Bi @ 1000µg/g	50g	
TOSBI-5M05G	Sulfur-Free Bismuth conc. 5000µg/g	Hydrocarbon Oil	Bi @ 5000µg/g	50g	
TOS-B-1M5G	Sulfur-Free Boron conc. 1000 µg/g Hydrocarbon Oil 50g	Hydrocarbon Oil	B @ 1000µg/g	50g	
TOS-B-5M5G	Sulfur-Free Boron conc. 5000 µg/g Hydrocarbon Oil 50g	Hydrocarbon Oil	B @ 5000µg/g	50g	
TOSCD-1M5G	Sulfur-Free Cadmium conc. 1000 µg/g Hydrocarbon Oil 50g	Hydrocarbon Oil	Cd @ 1000µg/g	50g	
TOSCD-5M5G	Sulfur-Free Cadmium conc. 5000 µg/g Hydrocarbon Oil 50g	Hydrocarbon Oil	Cd @ 5000µg/g	50g	
TOSCA-1M05G	Sulfur-Free Calcium conc. 1000µg/g	Hydrocarbon Oil	Ca @ 1000µg/g	50g	
TOSCA-5M05G	Sulfur-Free Calcium conc. 5000µg/g	Hydrocarbon Oil	Ca @ 5000µg/g	50g	
TOSCE-1M5G	Sulfur-Free Cerium conc. 1000 µg/g Hydrocarbon Oil 50g	Hydrocarbon Oil	Ce @ 1000µg/g	50g	
TOSCE-5M5G	Sulfur-Free Cerium conc. 5000µg/g	Hydrocarbon Oil	Ce @ 5000µg/g	50g	
TOSCR-1M5G	Sulfur-Free Chromium conc. 1000µg/g	Hydrocarbon Oil	Cr @ 1000µg/g	50g	
TOSCR-5M5G	Sulfur-Free Chromium conc. 5000µg/g	Hydrocarbon Oil	Cr @ 5000µg/g	50g	
TOSCO-1M5G	Sulfur-Free Cobalt conc. 1000µg/g	Hydrocarbon Oil	Co @ 1000µg/g	50g	
TOSCO-5M5G	Sulfur-Free Cobalt conc. 5000µg/g	Hydrocarbon Oil	Co @ 5000µg/g	50g	
TOSCU-1M5G	Sulfur-Free Copper conc. 1000µg/g	Hydrocarbon Oil	Cu @ 1000µg/g	50g	
TOSCU-5M5G	Sulfur-Free Copper conc. 5000µg/g	Hydrocarbon Oil	Cu @ 5000µg/g	50g	
TOSGA-1M5G	Sulfur-Free Gallium conc. 1000µg/g	Hydrocarbon Oil	Ga @ 1000µg/g	50g	
TOSGA-5M5G	Sulfur-Free Gallium conc. 5000µg/g	Hydrocarbon Oil	Ga @ 5000µg/g	50g	
TOSAU-1M5G	Sulfur-Free Gold conc. 1000µg/g	Hydrocarbon Oil	Au @ 1000µg/g	50g	
TOSFE-1M5G	Sulfur-Free Iron conc. 1000µg/g	Hydrocarbon Oil	Fe @ 1000µg/g	50g	

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TOSFE-5M5G	Sulfur-Free Iron conc. 5000µg/g	Hydrocarbon Oil	Fe @ 5000µg/g	50g	
TOSPB-1M5G	Sulfur-Free Lead conc. 1000µg/g	Hydrocarbon Oil	Pb @ 1000µg/g	50g	
TOSPB-5M5G	Sulfur-Free Lead conc. 5000µg/g	Hydrocarbon Oil	Pb @ 5000µg/g	50g	
TOSLI-1M5G	Sulfur-Free Lithium conc. 1000µg/g	Hydrocarbon Oil	Li @ 1000µg/g	50g	
TOSLI-5M5G	Sulfur-Free Lithium conc. 5000µg/g	Hydrocarbon Oil	Li @ 5000µg/g	50g	
TOSMG-1M5G	Sulfur-Free Magnesium conc. 1000µg/g	Hydrocarbon Oil	Mg @ 1000µg/g	50g	
TOSMG-5M5G	Sulfur-Free Magnesium conc. 5000µg/g	Hydrocarbon Oil	Mg @ 5000µg/g	50g	
TOSMN-1M5G	Sulfur-Free Manganese conc. 1000µg/g	Hydrocarbon Oil	Mn @ 1000µg/g	50g	
TOSMN-5M5G	Sulfur-Free Manganese conc. 5000µg/g	Hydrocarbon Oil	Mn @ 5000µg/g	50g	
TOSHG-1M5G	Sulfur-Free Mercury conc. 1000µg/g	Hydrocarbon Oil	Hg @ 1000µg/g	50g	
TOSMO-1M5G	Sulfur-Free Molybdenum conc. 1000µg/g	Hydrocarbon Oil	Mo @ 1000µg/g	50g	
TOSMO-5M5G	Sulfur-Free Molybdenum conc. 5000µg/g	Hydrocarbon Oil	Mo @ 5000µg/g	50g	
TOSNI-1M5G	Sulfur-Free Nickel conc. 1000µg/g	Hydrocarbon Oil	Ni @ 1000µg/g	50g	
TOSNI-5M5G	Sulfur-Free Nickel conc. 5000µg/g	Hydrocarbon Oil	Ni @ 5000µg/g	50g	
TOSP-1M5G	Sulfur-Free Phosphorus conc. 1000µg/g	Hydrocarbon Oil	P @ 1000µg/g	50g	
TOSP-5M5G	Sulfur-Free Phosphorus conc. 5000µg/g	Hydrocarbon Oil	P @ 5000µg/g	50g	
TOSK-1M5G	Sulfur-Free Potassium	Hydrocarbon Oil	Al @ 3%	50g	
TOSK-5M5G	Sulfur-Free Potassium	Hydrocarbon Oil	Al @ 3%	50g	
TOSSE-1M5G	Sulfur-Free Selenium conc. 1000µg/g	Hydrocarbon Oil	Sb @ 2%	50g	
TOSSI-1M5G	Sulfur-Free Silicon conc. 1000µg/g	Hydrocarbon Oil	Sb @ 2%	50g	
TOSSI-5M5G	Sulfur-Free Silicon conc. 5000µg/g	Hydrocarbon Oil	Ba @ 7%	50g	
TOSAG-1M5G	Sulfur-Free Silver conc. 1000µg/g	Hydrocarbon Oil	Ba @ 7%	50g	Y
TOSAG-5M5G	Sulfur-Free Silver conc. 5000µg/g	Hydrocarbon Oil	Bi @ 28%	50g	
TOSNA-1M5G	Sulfur-Free Sodium conc. 1000µg/g	Hydrocarbon Oil	Bi @ 28%	50g	
TOSNA-5M5G	Sulfur-Free Sodium conc. 5000µg/g	Hydrocarbon Oil	Na @ 5000µg/g	50g	
TOSSR-1M5G	Sulfur-Free Strontium conc. 1000µg/g	Hydrocarbon Oil	Sr @ 1000µg/g	50g	
TOSSR-5M5G	Sulfur-Free Strontium conc. 5000µg/g	Hydrocarbon Oil	Cd @ 7%	50g	
TOSSN-1M5G	Sulfur-Free Tin conc. 1000µg/g	Hydrocarbon Oil	Ca @ 2%	50g	
TOSSN-5M5G	Sulfur-Free Tin conc. 5000µg/g	Hydrocarbon Oil	Ca @ 2%	50g	
TOSTI-1M5G	Sulfur-Free Titanium conc. 1000µg/g	Hydrocarbon Oil	Ce @ 12%	50g	
TOSTI-5M5G	Sulfur-Free Titanium conc. 5000µg/g	Hydrocarbon Oil	Ce @ 12%	50g	
TOSV-1M5G	Sulfur-Free Vanadium conc. 1000µg/g	Hydrocarbon Oil	Cr @ 9%	50g	
TOSV-5M5G	Sulfur-Free Vanadium conc. 5000µg/g	Hydrocarbon Oil	Cr @ 9%	50g	
TOSY-1M5G	Sulfur-Free Yttrium conc. 1000µg/g	Hydrocarbon Oil	Co @ 3%	50g	
TOSY-5M5G	Sulfur-Free Yttrium conc. 1000µg/g	Hydrocarbon Oil	Co @ 3%	50g	
TOSZN-1M5G	Sulfur-Free Zinc conc. 1000µg/g	Hydrocarbon Oil	Cu @ 3%	50g	
TOSZN-5M5G	Sulfur-Free Zinc conc. 5000µg/g	Hydrocarbon Oil	Cu @ 3%	50g	
TOSZR-1M5G	Sulfur-Free Zirconium conc. 1000µg/g	Hydrocarbon Oil	Fe @ 6%	50g	
TOSZR-5M5G	Sulfur-Free Zirconium conc. 5000µg/g	Hydrocarbon Oil	Fe @ 6%	50g	

Sulfur-Free Metallo-Organic Concentrates for XRF

TOSAL3-2VG	Sulfur-Free Aluminium, nominal conc. 3%	Hydrocarbons	Al @ 3%	25g
TOSAL3-10G	Sulfur-Free Aluminium, nominal conc. 3%	Hydrocarbons	Al @ 3%	100g
TOSSB2-2VG	Sulfur-Free Antimony, nominal conc. 2%	Hydrocarbons	Sb @ 2%	25g
TOSSB2-10G	Sulfur-Free Antimony, nominal conc. 2%	Hydrocarbons	Sb @ 2%	100g
TOSBA7-2VG	Sulfur-Free Barium, nominal conc. 7%	Hydrocarbons	Ba @ 7%	25g
TOSBA7-10G	Sulfur-Free Barium, nominal conc. 7%	Hydrocarbons	Ba @ 7%	100g
TOSBI28-2VG	Sulfur-Free Bismuth, nominal conc. 28%	Hydrocarbons	Bi @ 28%	25g
TOSBI28-10G	Sulfur-Free Bismuth, nominal conc. 28%	Hydrocarbons	Bi @ 28%	100g
TOSB3-2VG	Sulfur-Free Boron, nominal conc. 3%	Hydrocarbons	B @ 3%	25g
TOSB3-10G	Sulfur-Free Boron, nominal conc. 3%	Hydrocarbons	B @ 3%	100g
TOSCD7-2VG	Sulfur-Free Cadmium, nominal conc. 7%	Hydrocarbons	Cd @ 7%	25g
TOSCD7-10G	Sulfur-Free Cadmium, nominal conc. 7%	Hydrocarbons	Cd @ 7%	100g
TOSCA2-2VG	Sulfur-Free Calcium, nominal conc. 2%	Hydrocarbons	Ca @ 2%	25g
TOSCA2-10G	Sulfur-Free Calcium, nominal conc. 2%	Hydrocarbons	Ca @ 2%	100g
TOSCE12-2VG	Sulfur-Free Cerium, nominal conc. 12%	Hydrocarbons	Ce @ 12%	25g
TOSCE12-10G	Sulfur-Free Cerium, nominal conc. 12%	Hydrocarbons	Ce @ 12%	100g
TOSCR9-2VG	Sulfur-Free Chromium, nominal conc. 9%	Hydrocarbons	Cr @ 9%	25g
TOSCR9-10G	Sulfur-Free Chromium, nominal conc. 9%	Hydrocarbons	Cr @ 9%	100g
TOSCO3-2VG	Sulfur-Free Cobalt, nominal conc. 3%	Hydrocarbons	Co @ 3%	25g
TOSCO3-10G	Sulfur-Free Cobalt, nominal conc. 3%	Hydrocarbons	Co @ 3%	100g
TOSCU3-2VG	Sulfur-Free Copper, nominal conc. 3%	Hydrocarbons	Cu @ 3%	25g
TOSCU3-10G	Sulfur-Free Copper, nominal conc. 3%	Hydrocarbons	Cu @ 3%	100g
TOSFE6-2VG	Sulfur-Free Iron, nominal conc. 6%	Hydrocarbons	Fe @ 6%	25g
TOSFE6-10G	Sulfur-Free Iron, nominal conc. 6%	Hydrocarbons	Fe @ 6%	100g

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TOSPB10-2VG	Sulfur-Free Lead, nominal conc. 10%	Hydrocarbons	Pb @ 10%	25g	Y
TOSPB10-10G	Sulfur-Free Lead, nominal conc. 10%	Hydrocarbons	Pb @ 10%	100g	Y
TOSLi2-2VG	Sulfur-Free Lithium, nominal conc. 2%	Hydrocarbons	Li @ 2%	25g	
TOSLi2-10G	Sulfur-Free Lithium, nominal conc. 2%	Hydrocarbons	Li @ 2%	100g	
TOSMG2-2VG	Sulfur-Free Magnesium, nominal conc. 2%	Hydrocarbons	Mg @ 2%	25g	
TOSMG2-10G	Sulfur-Free Magnesium, nominal conc. 2%	Hydrocarbons	Mg @ 2%	100g	
TOSMN6-2VG	Sulfur-Free Manganese, nominal conc. 6%	Hydrocarbons	Mn @ 6%	25g	
TOSMN6-10G	Sulfur-Free Manganese, nominal conc. 6%	Hydrocarbons	Mn @ 6%	100g	
TOSMO15-2VG	Sulfur-Free Molybdenum, nominal conc. 15%	Hydrocarbons	Mo @ 15%	25g	
TOSMO15-10G	Sulfur-Free Molybdenum, nominal conc. 15%	Hydrocarbons	Mo @ 15%	100g	
TOSNI8-2VG	Sulfur-Free Nickel, nominal conc. 8%	Hydrocarbons	Ni @ 8%	25g	Y
TOSNI8-10G	Sulfur-Free Nickel, nominal conc. 8%	Hydrocarbons	Ni @ 8%	100g	Y
TOSP11-2VG	Sulfur-Free Phosphorus, nominal conc. 11%	Hydrocarbons	P @ 11%	25g	
TOSP11-10G	Sulfur-Free Phosphorus, nominal conc. 11%	Hydrocarbons	P @ 11%	100g	
TOSK4-2VG	Sulfur-Free Potassium, nominal conc. 4%	Hydrocarbons	K @ 4%	25g	
TOSK4-10G	Sulfur-Free Potassium, nominal conc. 4%	Hydrocarbons	K @ 4%	100g	
TOSPR3-2VG	Sulfur-Free Praseodymium, nominal conc. 3%	Hydrocarbons	Pr @ 3%	25g	
TOSPR3-10G	Sulfur-Free Praseodymium, nominal conc. 3%	Hydrocarbons	Pr @ 3%	100g	
TOSSI10-2VG	Sulfur-Free Silicon, nominal conc. 18%	Hydrocarbons	Si @ 18%	25g	
TOSSI10-10G	Sulfur-Free Silicon, nominal conc. 18%	Hydrocarbons	Si @ 18%	100g	
TOSAG1-2VG	Sulfur-Free Silver, nominal conc. 1%	Hydrocarbons	Ag @ 1%	25g	Y
TOSAG1-10G	Sulfur-Free Silver, nominal conc. 1%	Hydrocarbons	Ag @ 1%	100g	Y
TOSNA3-2VG	Sulfur-Free Sodium, nominal conc. 3%	Hydrocarbons	Na @ 3%	25g	
TOSNA3-10G	Sulfur-Free Sodium, nominal conc. 3%	Hydrocarbons	Na @ 3%	100g	
TOSSR9-2VG	Sulfur-Free Strontium, nominal conc. 9%	Hydrocarbons	Sr @ 9%	25g	
TOSSR9-10G	Sulfur-Free Strontium, nominal conc. 9%	Hydrocarbons	Sr @ 9%	100g	
TOSSN18-2VG	Sulfur-Free Tin, nominal conc. 18%	Hydrocarbons	Sn @ 18%	25g	Y
TOSSN18-10G	Sulfur-Free Tin, nominal conc. 18%	Hydrocarbons	Sn @ 18%	100g	Y
TOSTiT7-2VG	Sulfur-Free Titanium, nominal conc. 7%	Hydrocarbons	Ti @ 7%	25g	
TOSTiT7-10G	Sulfur-Free Titanium, nominal conc. 7%	Hydrocarbons	Ti @ 7%	100g	
TOSV4-2VG	Sulfur-Free Vanadium, nominal conc. 4%	Hydrocarbons	V @ 4%	25g	
TOSV4-10G	Sulfur-Free Vanadium, nominal conc. 4%	Hydrocarbons	V @ 4%	100g	
TOSY2-2VG	Sulfur-Free Yttrium, nominal conc. 2%	Hydrocarbons	Y @ 2%	25g	
TOSY2-10G	Sulfur-Free Yttrium, nominal conc. 2%	Hydrocarbons	Y @ 2%	100g	
TOSZN18-2VG	Sulfur-Free Zinc, nominal conc. 18%	Hydrocarbons	Zn @ 18%	25g	
TOSZN18-10G	Sulfur-Free Zinc, nominal conc. 18%	Hydrocarbons	Zn @ 18%	100g	
TOSZR24-2VG	Sulfur-Free Zirconium, nominal conc. 24%	Hydrocarbons	Zr @ 24%	25g	
TOSZR24-10G	Sulfur-Free Zirconium, nominal conc. 24%	Hydrocarbons	Zr @ 24%	100g	
Stabilizer for Sulfur-Free Standard Prep.					
TSTB-100G	Stabilizer for Sulfur-Free Metallo-Organics	Add to solutions at 15-30% (v/v)	Stabilizer	100g	
Wear Metal Standards for XRF					
Wear Metal Calibration Set - Ag, Al, Ba, Ca, Cd, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Si, Sn, Ti, V, Zn. Concentrations randomly arranged to correct for inter-element effects.					
TWMSET-17		Hydrocarbon Oil	SET	17x50g	
Sulfur and Metals in Oil Standards for XRF					
TSM1-2010	Sulfur & Metals in Oil Standard 1 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 0 wt %, Fe @ 0µg/g, Ni @ 0µg/g, V @ 0µg/g	100mL	
TSM2-2010	Sulfur & Metals in Oil Standard 2 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 2.5 wt %, Fe @ 400µg/g, Ni @ 100µg/g, V @ 250µg/g	100mL	
TSM3-2010	Sulfur & Metals in Oil Standard 3 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 0.5 wt %, Fe @ 300µg/g, Ni @ 10µg/g, V @ 500µg/g	100mL	
TSM4-2010	Sulfur & Metals in Oil Standard 4 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 1.0 wt %, Fe @ 0µg/g, Ni @ 80µg/g, V @ 350µg/g	100mL	
TSM5-2010	Sulfur & Metals in Oil Standard 5 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 4.5 wt %, Fe @ 250µg/g, Ni @ 60µg/g, V @ 100µg/g	100mL	
TSM6-2010	Sulfur & Metals in Oil Standard 6 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 4.0 wt %, Fe @ 350µg/g, Ni @ 30µg/g, V @ 200µg/g	100mL	

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TSM7-2010	Sulfur & Metals in Oil Standard 7 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 3.5 wt %, Fe @ 200µg/g, Ni @ 50µg/g, V @ 0µg/g	100mL	
TSM8-2010	Sulfur & Metals in Oil Standard 8 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 5.5 wt %, Fe @ 50µg/g, Ni @ 40µg/g, V @ 400µg/g	100mL	
TSM9-2010	Sulfur & Metals in Oil Standard 9 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 2.0 wt %, Fe @ 450µg/g, Ni @ 20µg/g, V @ 300µg/g	100mL	
TSM10-2010	Sulfur & Metals in Oil Standard 10 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 1.5 wt %, Fe @ 500µg/g, Ni @ 5µg/g, V @ 150µg/g	100mL	
TSM11-2010	Sulfur & Metals in Oil Standard 11 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 3.0 wt %, Fe @ 150µg/g, Ni @ 70µg/g, V @ 25µg/g	100mL	
TSM12-2010	Sulfur & Metals in Oil Standard 12 - S, Fe, Ni, V	20 cSt Mineral Oil	S @ 5.0 wt %, Fe @ 100µg/g, Ni @ 0µg/g, V @ 50µg/g	100mL	
TSM-S1210	Sulfur & Metals in Oil Complete Set - S, Fe, Ni, V. Concentrations randomly arranged.	20 cSt Mineral Oil	SET	12x100mL	

Lube Oil Standards for XRF

TLO1-B10	Lubricating Oil Standard 1 - S, Ca, P, Zn	Lubricating Oil	S @ 0 wt%, Ca @ 0 wt%, P @ 0 wt%, Zn @ 0 wt%	100mL
TLO2-B10	Lubricating Oil Standard 2 - S, Ca, P, Zn	Lubricating Oil	S @ 0.05 wt%, Ca @ 0.6 wt%, P @ 0.005 wt%, Zn @ 0.08 wt%	100mL
TLO3-B10	Lubricating Oil Standard 3 - S, Ca, P, Zn	Lubricating Oil	S @ 0.3 wt%, Ca @ 0 wt%, P @ 0.02 wt%, Zn @ 0.175 wt%	100mL
TLO4-B10	Lubricating Oil Standard 4 - S, Ca, P, Zn	Lubricating Oil	S @ 0.15 wt%, Ca @ 0.5 wt%, P @ 0.03 wt%, Zn @ 0.07wt%	100mL
TLO5-B10	Lubricating Oil Standard 5 - S, Ca, P, Zn	Lubricating Oil	S @ 0.1 wt%, Ca @ 0.3 wt%, P @ 0.06 wt%, Zn @ 0.13 wt%	100mL
TLO6-B10	Lubricating Oil Standard 6 - S, Ca, P, Zn	Lubricating Oil	S @ 0.175 wt%, Ca @ 0.4 wt%, P @ 0.2 wt%, Zn @ 0.05 wt%	100mL
TLO7-B10	Lubricating Oil Standard 7 - S, Ca, P, Zn	Lubricating Oil	S @ 0.075 wt%, Ca @ 0.2 wt%, P @ 0.08 wt%, Zn @ 0.12 wt%	100mL
TLO8-B10	Lubricating Oil Standard 8 - S, Ca, P, Zn	Lubricating Oil	S @ 0.125 wt%, Ca @ 0.25 wt%, P @ 0.05 wt%, Zn @ 0 wt%	100mL
TLO9-B10	Lubricating Oil Standard 9 - S, Ca, P, Zn	Lubricating Oil	S @ 0.4 wt%, Ca @ 0.35 wt%, P @ 0.04 wt%, Zn @ 0.11 wt%	100mL
TLO10-B10	Lubricating Oil Standard 10 - S, Ca, P, Zn	Lubricating Oil	S @ 0.225 wt%, Zn @ 0.15 wt%	100mL
TLO11-B10	Lubricating Oil Standard 11 - S, Ca, P, Zn	Lubricating Oil	S @ 0.2 wt%, Ca @ 0.05 wt%, P @ 0.15 wt%, Zn @ 0.2 wt%	100mL
TLO12-B10	Lubricating Oil Standard 12 - S, Ca, P, Zn	Lubricating Oil	S @ 0.55 wt%, Ca @ 0.005 wt%, P @ 0 wt%, Zn @ 0.14 wt%	100mL
TLO13-B10	Lubricating Oil Standard 13 - S, Ca, P, Zn	Lubricating Oil	S @ 0.45 wt%, Ca @ 0.1 wt%, P @ 0.01 wt%, Zn @ 0.25 wt%	100mL
TLO14-B10	Lubricating Oil Standard 14 - S, Ca, P, Zn	Lubricating Oil	S @ 0.6 wt%, Ca @ 0.01 wt%, P @ 0.125 wt%, Zn @ 0.06 wt%	100mL
TLO15-B10	Lubricating Oil Standard 15 - S, Ca, P, Zn	Lubricating Oil	S @ 0.25 wt%, Ca @ 0.15 wt%, P @ 0.1 wt%, Zn @ 0 wt%	100mL
TL16-B10	Lubricating Oil Standard 16 - S, Ca, P, Zn	Lubricating Oil	S @ 0.35 wt%, Ca @ 0.025 wt%, P @ 0.175 wt%, Zn @ 0.1 wt%	100mL
TLO-S1610	Lubricating Oil Standards Complete Set - S, Ca, P, Zn. Concentrations randomly arranged.	Lubricating Oil	SET	16x100mL
TLO-S235M	Lube Oil Calibration Set - Ba, Ca, Cl, Mg, Mo, P, S, Si, Zn. Concentrations randomly arranged to correct for inter-element effects.	Lubricating Oil	SET	23x50mL

Standards for Sulfur in Diesel Fuel Analysis

TSBL-LO10	Sulfur Blank (0 wt%)	Light Mineral Oil	S @ 0µg/g	100mL
TS-05LO10	Sulfur @ 5µg/g (0.0005 wt%)	Light Mineral Oil	S @ 5µg/g	100mL
TS-1LO10	Sulfur @ 10µg/g (0.0010 wt%)	Light Mineral Oil	S @ 10µg/g	100mL
TS-1VLO10	Sulfur @ 15µg/g (0.0015 wt%)	Light Mineral Oil	S @ 15µg/g	100mL
TS-2LO10	Sulfur @ 20µg/g (0.0020 wt%)	Light Mineral Oil	S @ 20µg/g	100mL
TS-2VLO10	Sulfur @ 25µg/g (0.0025 wt%)	Light Mineral Oil	S @ 25µg/g	100mL
TS-5LO10	Sulfur @ 50µg/g (0.0050 wt%)	Light Mineral Oil	S @ 50µg/g	100mL
TS-7VLO10	Sulfur @ 75µg/g (0.0075 wt%)	Light Mineral Oil	S @ 75µg/g	100mL
TS-10LO10	Sulfur @ 100µg/g (0.0100 wt%)	Light Mineral Oil	S @ 100µg/g	100mL
TS-20LO10	Sulfur @ 200µg/g (0.0200 wt%)	Light Mineral Oil	S @ 200µg/g	100mL
TS-30LO10	Sulfur @ 300µg/g (0.0300 wt%)	Light Mineral Oil	S @ 300µg/g	100mL

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TS-40LO10	Sulfur @ 400µg/g (0.0400 wt%)	Light Mineral Oil	S @ 400µg/g	100mL	
TS-50LO10	Sulfur @ 500µg/g (0.0500 wt%)	Light Mineral Oil	S @ 500µg/g	100mL	
TS-75LO10	Sulfur @ 750µg/g (0.0750 wt%)	Light Mineral Oil	S @ 750µg/g	100mL	
TS-1MLO10	Sulfur @ 1000µg/g (0.100 wt%)	Light Mineral Oil	S @ 1000µg/g	100mL	
TS-1VML010	Sulfur @ 1500µg/g (0.150 wt%)	Light Mineral Oil	S @ 1500µg/g	100mL	
TS-3MLO10	Sulfur @ 3000µg/g (0.300 wt%)	Light Mineral Oil	S @ 3000µg/g	100mL	
TS-5MLO10	Sulfur @ 5000µg/g (0.500 wt%)	Light Mineral Oil	S @ 5000µg/g	100mL	
TS-7VML010	Sulfur @ 7500µg/g (0.750 wt%)	Light Mineral Oil	S @ 7500µg/g	100mL	
TS-1TLO10	Sulfur @ 10,000µg/g (1.00 wt%)	Light Mineral Oil	S @ 10,000µg/g	100mL	
TS-2TLO10	Sulfur @ 20,000µg/g (2.00 wt%)	Light Mineral Oil	S @ 20,000µg/g	100mL	
TS-3TLO10	Sulfur @ 30,000µg/g (3.00 wt%)	Light Mineral Oil	S @ 30,000µg/g	100mL	
TS-4TLO10	Sulfur @ 40,000µg/g (4.00 wt%)	Light Mineral Oil	S @ 40,000µg/g	100mL	
TS-5TLO10	Sulfur @ 50,000µg/g (5.00 wt%)	Light Mineral Oil	S @ 50,000µg/g	100mL	
TSBL-YO10	Sulfur Blank (0 wt%)	Heavy Mineral Oil	S @ 0µg/g	100mL	
TS-05YO10	Sulfur @ 5µg/g (0.0005 wt%)	Heavy Mineral Oil	S @ 5µg/g	100mL	
TS-1YO10	Sulfur @ 10µg/g (0.0010 wt%)	Heavy Mineral Oil	S @ 10µg/g	100mL	
TS-1VYO10	Sulfur @ 15µg/g (0.0015 wt%)	Heavy Mineral Oil	S @ 15µg/g	100mL	
TS-2YO10	Sulfur @ 20µg/g (0.0020 wt%)	Heavy Mineral Oil	S @ 20µg/g	100mL	
TS-2VYO10	Sulfur @ 25µg/g (0.0025 wt%)	Heavy Mineral Oil	S @ 25µg/g	100mL	
TS-5YO10	Sulfur @ 50µg/g (0.0050 wt%)	Heavy Mineral Oil	S @ 50µg/g	100mL	
TS-7VYO10	Sulfur @ 75µg/g (0.0075 wt%)	Heavy Mineral Oil	S @ 75µg/g	100mL	
TS-10YO10	Sulfur @ 100µg/g (0.0100 wt%)	Heavy Mineral Oil	S @ 100µg/g	100mL	
TS-20YO10	Sulfur @ 200µg/g (0.0200 wt%)	Heavy Mineral Oil	S @ 200µg/g	100mL	
TS-30YO10	Sulfur @ 300µg/g (0.0300 wt%)	Heavy Mineral Oil	S @ 300µg/g	100mL	
TS-40YO10	Sulfur @ 400µg/g (0.0400 wt%)	Heavy Mineral Oil	S @ 400µg/g	100mL	
TS-50YO10	Sulfur @ 500µg/g (0.0500 wt%)	Heavy Mineral Oil	S @ 500µg/g	100mL	
TS-75YO10	Sulfur @ 750µg/g (0.0750 wt%)	Heavy Mineral Oil	S @ 750µg/g	100mL	
TS-1MYO10	Sulfur @ 1000µg/g (0.100 wt%)	Heavy Mineral Oil	S @ 1000µg/g	100mL	
TS-1VMYO10	Sulfur @ 1500µg/g (0.150 wt%)	Heavy Mineral Oil	S @ 1500µg/g	100mL	
TS-3MYO10	Sulfur @ 3000µg/g (0.300 wt%)	Heavy Mineral Oil	S @ 3000µg/g	100mL	
TS-5MYO10	Sulfur @ 5000µg/g (0.500 wt%)	Heavy Mineral Oil	S @ 5000µg/g	100mL	
TS-7VMYO10	Sulfur @ 7500µg/g (0.750 wt%)	Heavy Mineral Oil	S @ 7500µg/g	100mL	
TS-1TYO10	Sulfur @ 10,000µg/g (1.00 wt%)	Heavy Mineral Oil	S @ 10,000µg/g	100mL	
TS-2TYO10	Sulfur @ 20,000µg/g (2.00 wt%)	Heavy Mineral Oil	S @ 20,000µg/g	100mL	
TS-3TYO10	Sulfur @ 30,000µg/g (3.00 wt%)	Heavy Mineral Oil	S @ 30,000µg/g	100mL	
TS-4TYO10	Sulfur @ 40,000µg/g (4.00 wt%)	Heavy Mineral Oil	S @ 40,000µg/g	100mL	
TS-5TYO10	Sulfur @ 50,000µg/g (5.00 wt%)	Heavy Mineral Oil	S @ 50,000µg/g	100mL	
TSBL-F10	Sulfur Blank (0 wt%)	#2 Diesel Fuel	S @ 0µg/g	100mL	Y
TS-05F10	Sulfur @ 5µg/g (0.0005 wt%)	#2 Diesel Fuel	S @ 5µg/g	100mL	Y
TS-1F10	Sulfur @ 10µg/g (0.0010 wt%)	#2 Diesel Fuel	S @ 10µg/g	100mL	Y
TS-1VF10	Sulfur @ 15µg/g (0.0015 wt%)	#2 Diesel Fuel	S @ 15µg/g	100mL	Y
TS-2F10	Sulfur @ 20µg/g (0.0020 wt%)	#2 Diesel Fuel	S @ 20µg/g	100mL	Y
TS-2VF10	Sulfur @ 25µg/g (0.0025 wt%)	#2 Diesel Fuel	S @ 25µg/g	100mL	Y
TS-5F10	Sulfur @ 50µg/g (0.0050 wt%)	#2 Diesel Fuel	S @ 50µg/g	100mL	Y
TS-7VF10	Sulfur @ 75µg/g (0.0075 wt%)	#2 Diesel Fuel	S @ 75µg/g	100mL	Y
TS-10F10	Sulfur @ 100µg/g (0.0100 wt%)	#2 Diesel Fuel	S @ 100µg/g	100mL	Y
TS-20F10	Sulfur @ 200µg/g (0.0200 wt%)	#2 Diesel Fuel	S @ 200µg/g	100mL	Y
TS-30F10	Sulfur @ 300µg/g (0.0300 wt%)	#2 Diesel Fuel	S @ 300µg/g	100mL	Y
TS-40F10	Sulfur @ 400µg/g (0.0400 wt%)	#2 Diesel Fuel	S @ 400µg/g	100mL	Y
TS-50F10	Sulfur @ 500µg/g (0.0500 wt%)	#2 Diesel Fuel	S @ 500µg/g	100mL	Y
TS-75F10	Sulfur @ 750µg/g (0.0750 wt%)	#2 Diesel Fuel	S @ 750µg/g	100mL	Y
TS-1MF10	Sulfur @ 1000µg/g (0.100 wt%)	#2 Diesel Fuel	S @ 1000µg/g	100mL	Y
TS-1VMF10	Sulfur @ 1500µg/g (0.150 wt%)	#2 Diesel Fuel	S @ 1500µg/g	100mL	Y
TS-3MF0	Sulfur @ 3000µg/g (0.300 wt%)	#2 Diesel Fuel	S @ 3000µg/g	100mL	Y
TS-5MF10	Sulfur @ 5000µg/g (0.500 wt%)	#2 Diesel Fuel	S @ 5000µg/g	100mL	Y
TS-7VMF10	Sulfur @ 7500µg/g (0.750 wt%)	#2 Diesel Fuel	S @ 7500µg/g	100mL	Y
TS-1TF10	Sulfur @ 10,000µg/g (1.00 wt%)	#2 Diesel Fuel	S @ 10,000µg/g	100mL	Y
TS-2TF10	Sulfur @ 20,000µg/g (2.00 wt%)	#2 Diesel Fuel	S @ 20,000µg/g	100mL	Y
TS-3TFO10	Sulfur @ 30,000µg/g (3.00 wt%)	#2 Diesel Fuel	S @ 30,000µg/g	100mL	Y
TS-4TF10	Sulfur @ 40,000µg/g (4.00 wt%)	#2 Diesel Fuel	S @ 40,000µg/g	100mL	Y
TS-5TF10	Sulfur @ 50,000µg/g (5.00 wt%)	#2 Diesel Fuel	S @ 50,000µg/g	100mL	Y

Sulfur in Kerosene Standards

TSBL-K10	Sulfur Blank (0 wt%)	Kerosene	S @ 0µg/g	100mL
TS-1K10	Sulfur @ 10µg/g (0.0010 wt%)	Kerosene	S @ 10µg/g	100mL
TS-5K10	Sulfur @ 50µg/g (0.0050 wt%)	Kerosene	S @ 50µg/g	100mL
TS-10K10	Sulfur @ 100µg/g (0.0100 wt%)	Kerosene	S @ 100µg/g	100mL
TS-30K10	Sulfur @ 300µg/g (0.0300 wt%)	Kerosene	S @ 300µg/g	100mL

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TS-50K10	Sulfur @ 500µg/g (0.0500 wt%)	Kerosene	S @ 500µg/g	100mL	
TS-75K10	Sulfur @ 750µg/g (0.0750 wt%)	Kerosene	S @ 750µg/g	100mL	
TS-1MK10	Sulfur @ 1000µg/g (0.100 wt%)	Kerosene	S @ 1000µg/g	100mL	
Sulfur in Isooctane Standards					
TSBL-I10	Sulfur Blank (0 wt%)	Isooctane	S @ 0µg/g	100mL	Y
	Sulfur @ 5 µg/g (0.0005 wt%) Isooctane 100mL Flamm.	Isooctane	S @ 5µg/g	100mL	Y
TS-05I10	Liquid UN1262 Class 3	Isooctane	S @ 10µg/g	100mL	Y
TS-1I10	Sulfur @ 15µg/g (0.0015 wt%)	Isooctane	S @ 15µg/g	100mL	Y
TS-2I10	Sulfur @ 20µg/g (0.0020 wt%)	Isooctane	S @ 20µg/g	100mL	Y
TS-2VI10	Sulfur @ 25µg/g (0.0025 wt%)	Isooctane	S @ 25µg/g	100mL	Y
	Sulfur @ 50 µg/g (0.0050 wt%) Isooctane 100mL Flamm.	Isooctane	S @ 50µg/g	100mL	Y
TS-5I10	Liquid UN1262 Class 3	Isooctane	S @ 75µg/g	100mL	Y
TS-7VI10	Sulfur @ 100µg/g (0.0100 wt%)	Isooctane	S @ 100µg/g	100mL	Y
TS-10I10	Sulfur @ 200µg/g (0.0200 wt%)	Isooctane	S @ 200µg/g	100mL	Y
TS-20I10	Sulfur @ 300µg/g (0.0300 wt%)	Isooctane	S @ 300µg/g	100mL	Y
TS-30I10	Sulfur @ 400µg/g (0.0400 wt%)	Isooctane	S @ 400µg/g	100mL	Y
TS-40I10	Sulfur @ 500µg/g (0.0500 wt%)	Isooctane	S @ 500µg/g	100mL	Y
TS-75I10	Sulfur @ 750µg/g (0.0750 wt%)	Isooctane	S @ 750µg/g	100mL	Y
TS-1MII10	Sulfur @ 1000µg/g (0.100 wt%)	Isooctane	S @ 1000µg/g	100mL	Y
TS-3MII10	Sulfur @ 3000µg/g (0.300 wt%)	Isooctane	S @ 3000µg/g	100mL	Y
Sulfur in Crude and Residual Oil Standards					
TSBL-CO10	Unspiked Sulfur, Matrix Blank	Crude Oil	S @ 0µg/g	100mL	Y
TS-1MCO10	Sulfur @ 1000µg/g (0.100 wt%)	Crude Oil	S @ 1000µg/g	100mL	Y
TS-2VMCO11	Sulfur @ 2500µg/g (0.250 wt%)	Crude Oil	S @ 2500µg/g	100mL	Y
TS-5MCO12	Sulfur @ 5000µg/g (0.500 wt%)	Crude Oil	S @ 5000µg/g	100mL	Y
TS-1TCO13	Sulfur @ 10,000µg/g (1.00 wt%)	Crude Oil	S @ 10,000µg/g	100mL	Y
TS-2TCO14	Sulfur @ 20,000µg/g (2.00 wt%)	Crude Oil	S @ 20,000µg/g	100mL	Y
TS-3TCO15	Sulfur @ 30,000µg/g (3.00 wt%)	Crude Oil	S @ 30,000µg/g	100mL	Y
TS-4TCO16	Sulfur @ 40,000µg/g (4.00 wt%)	Crude Oil	S @ 40,000µg/g	100mL	Y
TS-5TCO17	Sulfur @ 50,000µg/g (5.00 wt%)	Crude Oil	S @ 50,000µg/g	100mL	Y
TS-2VMR10	Sulfur @ 2500µg/g (0.250 wt%)	Residual Oil	S @ 2500µg/g	100mL	
TS-5MR10	Sulfur @ 5000µg/g (0.500 wt%)	Residual Oil	S @ 5000µg/g	100mL	
TS-1TR10	Sulfur @ 10,000µg/g (1.00 wt%)	Residual Oil	S @ 10,000µg/g	100mL	
TS-2TR10	Sulfur @ 20,000µg/g (2.00 wt%)	Residual Oil	S @ 20,000µg/g	100mL	
TS-3TR10	Sulfur @ 30,000µg/g (3.00 wt%)	Residual Oil	S @ 30,000µg/g	100mL	
TS-4TR10	Sulfur @ 40,000µg/g (4.00 wt%)	Residual Oil	S @ 40,000µg/g	100mL	
TS-5TR10	Sulfur @ 50,000µg/g (5.00 wt%)	Residual Oil	S @ 50,000µg/g	100mL	
Matrix Oils and Solvents					
T20MIN-50M	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	20 cSt Mineral Oil	S @ 1ppm	500mL	
T20MIN-05N	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	20 cSt Mineral Oil	S @ 1ppm	0.5 Gal.	
T75MIN-50M	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	75 cSt Mineral Oil	S @ 1ppm	500mL	
T75MIN-05N	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	75 cSt Mineral Oil	S @ 1ppm	0.5 Gal.	
TDFL-50M	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	#2 Diesel Fuel	S @ 1ppm	500mL	Y
TDFL-05N	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	#2 Diesel Fuel	S @ 1ppm	0.5 Gal.	Y
TISOT-50M	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	Isooctane	S @ 1ppm	500mL	Y
TISOT-05N	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	Isooctane	S @ 1ppm	0.5 Gal.	Y
TKERO-50M	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	Kerosene	S @ 1ppm	500mL	
TKERO-05N	High-Purity Matrix Oils and Solvents (<1ppm Sulfur)	Kerosene	S @ 1ppm	0.5 Gal.	
Polysulfide Oil Standards					
TQPS01-1L	QC Sample - Sulfur @ 5µg/g, from Polysulfide Oil	Mineral Oil	S @ 5µg/g	1L	
TQPS02-1L	QC Sample - Sulfur @ 10µg/g, from Polysulfide Oil	Mineral Oil	S @ 10µg/g	1L	
TQPS03-1L	QC Sample - Sulfur @ 25µg/g, from Polysulfide Oil	Mineral Oil	S @ 25µg/g	1L	
TDPS04-1L	Drift Monitor - Sulfur @ 100µg/g, from Polysulfide Oil	Mineral Oil	S @ 100µg/g	1L	
TDPS05-1L	Drift Monitor - Sulfur @ 500µg/g, from Polysulfide Oil	Mineral Oil	S @ 500µg/g	1L	
TDPS06-1L	Drift Monitor - Sulfur @ 1000µg/g, from Polysulfide Oil	Mineral Oil	S @ 1000µg/g	1L	
TPSBL-1L	Polysulfide Oil Blank	Mineral Oil	S @ 0µg/g	1L	

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
PSPL07-S135M	Sulfur Standard Calibration Set 1 - Low Concentrations, from Polysulfide Oil	Mineral Oil	SET	13x50mL	
PSPL08-S125M	Sulfur Standard Calibration Set 2 - High Concentrations, from Polysulfide Oil	Mineral Oil	SET	12x50mL	
PSPL09-S65M	Sulfur Standard Calibration Set 3A - Low Concentrations, from Polysulfide Oil	Mineral Oil	SET	6x50mL	
PSPL10-S402M	Ultra Low Sulfur EPA Qualification Set, from Polysulfide Oil	Mineral Oil	SET	40x20mL	
PSPL11-S402M	High Sulfur EPA Qualification Set, from Polysulfide Oil	Mineral Oil	SET	40x20mL	
Sulfur in Petroleum Products (Ampoules) for Low-Level Sulfur Analytical Techniques					
TUV1-S602M	Total Sulfur by UV Fluorescence Set for ASTM D5453 - S @ 0, 1.0, 2.5, 5, 7.5, 10 ng/µL	Isooctane	S @ 0, 1.0, 2.5, 5, 7.5, 10 ng/µL	6x2mL ampoules	Y
TUV2-S602M	Total Sulfur by UV Fluorescence Set for ASTM D5453 - S @ 0, 5, 25, 50, 100, 200 ng/µL	Isooctane	S @ 0, 5, 25, 50, 100, 200 ng/µL	6x2mL ampoules	Y
TUV3-S602M	Total Sulfur by UV Fluorescence Set for ASTM D5453 - S @ 0, 100, 250, 500, 750, 1000 ng/µL	Isooctane	S @ 0, 100, 250, 500, 750, 1000 ng/µL	6x2mL ampoules	Y
TUS4-S702M	Sulfur by Hydrogenolysis and Rateometric Colorimetry Set for ASTM D4045 - S @ 0, 0.1, 0.5, 1.0, 2.5, 5.0, 10 µg/g	Isooctane	S @ 0, 0.1, 0.5, 1.0, 2.5, 5.0, 10 µg/g	7x2mL ampoules	Y
TUOP-6X20	Determination of Mercaptan Sulfur for UOP 163 and ASTM D3227 - S @ 30 µg/g 80% Isooctane/20% Toluene 6x2mL ampoules	80% Isooctane/20% Toluene	S @ 30 µg/g	6x2mL	
TSS6-02M	Sulfur Compounds by Selective Detection for ASTM D5623 - Multi-component standard containing 14 sulfur species @ 100 µg/g (as Sulfur)	Base Fuel	S @ 100 µg/g	2mL	Y
TSS7-02M	Sulfur Compounds by Selective Detection for ASTM D5623 - Multi-component standard containing 22 sulfur species @ 50 µg/g (as Component)	Base Fuel	S @ 50 µg/g	2mL	Y
Sulfur and Nitrogen Products (Ampoules) for Low-Level Analytical Techniques					
TN01-S602M	Sulfur and Nitrogen Combined - S @ 0, 1, 5, 10, 15, 20 ng/µL and N @ 0, and N @ 0, 1, 5, 20, 35, 50 ng/µL	Isooctane	S @ 0, 1, 5, 10, 15, 20 ng/µL and N @ 0, 1, 5, 20, 35, 50 ng/µL	6x2mL ampoules	
TN02-S1002M	Trace Nitrogen by Chemiluminescence Set for ASTM D4629 - N @ 0, 1, 2, 10, 20, 50, 100, 200, 500, 1000 ng/µL	Isooctane	N @ 0, 1, 2, 10, 20, 50, 100, 200, 500, 1000 ng/µL	10x2mL ampoules	Y
TN03-S602M	Trace Nitrogen by Oxidative Combustion and Electrochemical Detection Set for ASTM D6366 - N @ 0.1, 0.5, 1.0, 2.5, 5.0, 10 ng/µL	p-Xylene	N @ 0.1, 0.5, 1.0, 2.5, 5.0, 10 ng/µL	6x2mL ampoules	Y
TN04-S502M	Trace Nitrogen by Oxidative Combustion and Electrochemical Detection Set for ASTM D6366 - N @ 10, 25, 50, 75, 100 ng/µL	Isooctane	N @ 10, 25, 50, 75, 100 ng/µL	5x2mL ampoules	Y
Chlorine in Oil Standards for XRF, ICP and Other Techniques					
TCLBL-YO10	Chlorine Blank (0 wt%)	Heavy Mineral Oil	Cl 0 µg/g	100mL	
TCL-1YO10	Chlorine @ 10 µg/g (0.0010 wt%)	Heavy Mineral Oil	Cl @ 10 µg/g	100mL	
TCL-10YO10	Chlorine @ 100 µg/g (0.0100 wt%)	Heavy Mineral Oil	Cl @ 100 µg/g	100mL	
TCL-50YO10	Chlorine @ 500 µg/g (0.0500 wt%)	Heavy Mineral Oil	Cl @ 500 µg/g	100mL	
TCL-1MYO10	Chlorine @ 1000 µg/g (0.1000 wt%)	Heavy Mineral Oil	Cl @ 1000 µg/g	100mL	
TCL-1TO10	Chlorine @ 10,000 µg/g (1.00 wt%)	Heavy Mineral Oil	Cl @ 10,000 µg/g	100mL	
TCL-5TYO10	Chlorine @ 50,000 µg/g (5.00 wt%)	Heavy Mineral Oil	Cl @ 50,000 µg/g	100mL	
Standards for Lead in Gasoline					
TPBBL-I10G	Lead @ 0.0 g/gal (ASTM D5059 Pt. A)	Isooctane	Pb @ 0.0 g/gal	100g	Y
TPB-01I10G	Lead @ 0.1 g/gal (ASTM D5059 Pt. A)	Isooctane	Pb @ 0.1 g/gal	100g	Y
TPB-1I10G	Lead @ 1.0 g/gal (ASTM D5059 Pt. A)	Isooctane	Pb @ 1.0 g/gal	100g	Y
TPB-2I10G	Lead @ 2.0 g/gal (ASTM D5059 Pt. A)	Isooctane	Pb @ 2.0 g/gal	100g	Y
TPB-3I10G	Lead @ 3.0 g/gal (ASTM D5059 Pt. A)	Isooctane	Pb @ 3.0 g/gal	100g	Y

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TPB-4I10G	Lead @ 4.0 g/gal (ASTM D5059 Pt. A)	Isooctane	Pb @ 4.0 g/gal	100g	Y
TPB-5I10G	Lead @ 5.0 g/gal (ASTM D5059 Pt. A)	Isooctane	Pb @ 5.0 g/gal	100g	Y
TPB-SA710G	Complete Lead Standard Set (ASTM D5059 Pt. A)	Isooctane	SET	7x100g	Y
TPB-0I10G	Lead @ 0.000 g/gal (ASTM D5059 Pt. C)	Isooctane	Pb @ 0.000 g/gal	100g	Y
TPB-001I10G	Lead @ 0.001 g/gal (ASTM D5059 Pt. C)	Isooctane	Pb @ 0.001 g/gal	100g	Y
TPB-05I10G	Lead @ 0.005 g/gal (ASTM D5059 Pt. C)	Isooctane	Pb @ 0.005 g/gal	100g	Y
TPB-010I10G	Lead @ 0.010 g/gal (ASTM D5059 Pt. C)	Isooctane	Pb @ 0.010 g/gal	100g	Y
TPB-050I10G	Lead @ 0.050 g/gal (ASTM D5059 Pt. C)	Isooctane	Pb @ 0.050 g/gal	100g	Y
TPB-100I10G	Lead @ 0.100 g/gal (ASTM D5059 Pt. C)	Isooctane	Pb @ 0.100 g/gal	100g	Y
TPB-300I10G	Lead @ 0.300 g/gal (ASTM D5059 Pt. C)	Isooctane	Pb @ 0.300 g/gal	100g	Y
TPB-SC710G	Complete Lead Standard Set (ASTM D5059 Pt. C)	Isooctane	SET	7x100g	Y

Internal Standards for XRF Analysis

TISBI-0110G	Bismuth Internal Standard for ASTM D5059 - Bi @ 0.793 g/L Mineral Oil	Bi @ 0.793 g/L	100g
TISBI-0140G	Bismuth Internal Standard for ASTM D5059 - Bi @ 0.793 g/L Mineral Oil	Bi @ 0.793 g/L	400g
TISBI-0210G	Bismuth Internal Standard for Pb Analysis by ASTM D5059 - Bi @ 0.793 g/L Mineral Oil	Bi @ 0.793 g/L	100g
TISBI-0240G	Bismuth Internal Standard for Pb Analysis by ASTM D5059 - Bi @ 0.793 g/L Mineral Oil	Bi @ 0.793 g/L	400g
TISMN-0310G	Manganese Internal Standard for Ni and V Analysis by ISO 14597 - Mn @ 0.05%	Mineral Oil	Mn @ 0.05%
TISMN-0340G	Manganese Internal Standard for Ni and V Analysis by ISO 14597 - Mn @ 0.05%	Mineral Oil	Mn @ 0.05%
TISZR-0410G	Zirconium Internal Standard for Low Sulfur Analysis by ISO 14596 - Zr @ 1%	Mineral Oil	Zr @ 1%
TISZR-0440G	Zirconium Internal Standard for Low Sulfur Analysis by ISO 14596 - Zr @ 1%	Mineral Oil	Zr @ 1%
TISZR-0510G	Zirconium Internal Standard for High Sulfur Analysis by ISO 14596 - Zr @ 16%	Mineral Oil	Zr @ 16%
TISZR-0540G	Zirconium Internal Standard for High Sulfur Analysis by ISO 14596 - Zr @ 16%	Mineral Oil	Zr @ 16%

Flash Point Reference Materials

TFP-0125	ASTM D93 (Pensky-Martens Closed Cup Tester) - Typical Flash Point Range: 25-35°C	Hydrocarbons	25°C - 35°C	250mL	Y
TFP-0225	ASTM D93 (Pensky-Martens Closed Cup Tester) - Typical Flash Point Range: 55-65°C	Hydrocarbons	55°C - 65°C	250mL	Y
TFP-0325	ASTM D93 (Pensky-Martens Closed Cup Tester) - Typical Flash Point Range: 70-80°C	Hydrocarbons	70°C - 80°C	250mL	Y
TFP-0425	ASTM D93 (Pensky-Martens Closed Cup Tester) - Typical Flash Point Range: 90-100°C	Hydrocarbons	90°C - 100°C	250mL	
TFP-0525	ASTM D92 (Cleveland Open Cup Tester) - Typical Flash Point Range: 190-215°C	Hydrocarbons	190°C - 215°C	250mL	
TFP-0625	ASTM D92 (Cleveland Open Cup Tester) - Typical Flash Point Range: 220-240°C	Hydrocarbons	220°C - 240°C	250mL	
TFP-0725	ASTM D56 (Tag Closed Cup Tester) - Typical Flash Point Range: 40-50°C	Hydrocarbons	40°C - 50°C	250mL	Y
TFP-0825	ASTM D56 (Tag Closed Cup Tester) - Typical Flash Point Range: 50-60°C	Hydrocarbons	50°C - 60°C	250mL	Y
TFP-0925	ASTM D56 (Tag Closed Cup Tester) - Typical Flash Point Range: 55-65°C	Hydrocarbons	55°C - 65°C	250mL	Y

Flash Point Certified Reference Materials

TFP-1025	ASTM D93 (Pensky-Martens Closed Cup Tester) - Typical Flash Point Range: 45-55°C	n-Decane	45°C - 55°C	250mL	Y
TFP-1125	ASTM D93 (Pensky-Martens Closed Cup Tester) - Typical Flash Point Range: 65-75°C	n-Undecane	65°C to 75°C	250mL	Y
TFP-1225	ASTM D93 (Pensky-Martens Closed Cup Tester) - Typical Flash Point Range: 110-120°C	n-Tetradecane	110°C to 120°C	250mL	
TFP-1325	ASTM D93 (Pensky-Martens Closed Cup Tester) - Typical Flash Point Range: 130-145°C	n-Hexadecane	130°C to 145°C	250mL	
TFP-1425	ASTM D92 (Cleveland Open Cup Tester) - Typical Flash Point Range: 110-120°C	n-Tetradecane	110°C to 120°C	250mL	

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
TFP-1525	ASTM D92 (Cleveland Open Cup Tester) - Typical Flash Point Range: 135-150°C	n-Hexadecane	135°C to 150°C	250mL	
TFP-1625	ASTM D56 (Tag Closed Cup Tester) - Typical Flash Point Range: 45-55°C	n-Decane	45°C to 55°C	250mL	Y
TFP-1725	ASTM D56 (Tag Closed Cup Tester) - Typical Flash Point Range: 60-70°C	n-Undecane	60°C to 70°C	250mL	Y
Viscosity Reference Standards					
TV-0550M	Nominal Viscosity: 4.5 cSt at 40°C, and 1.6 cSt at 100°C	Hydrocarbons	4.5 cSt @ 40°C & 1.6 cSt @ 100°C	500mL	
TV-150M	Nominal Viscosity: 9.5 cSt at 40°C, and 2.8 cSt at 100°C	Hydrocarbons	9.5 cSt at 40°C & 2.8 cSt at 100°C	500mL	
TV-250M	Nominal Viscosity: 9.5 cSt at 40°C, and 2.8 cSt at 100°C	Hydrocarbons	9.5 cSt at 40°C & 2.8 cSt at 100°C	500mL	
TV-350M	Nominal Viscosity: 9.5 cSt at 40°C, and 2.8 cSt at 100°C	Hydrocarbons	9.5 cSt at 40°C & 2.8 cSt at 100°C	500mL	
TV-550M	Nominal Viscosity: 9.5 cSt at 40°C, and 2.8 cSt at 100°C	Hydrocarbons	9.5 cSt at 40°C & 2.8 cSt at 100°C	500mL	
TV-650M	Nominal Viscosity: 9.5 cSt at 40°C, and 2.8 cSt at 100°C	Hydrocarbons	9.5 cSt at 40°C & 2.8 cSt at 100°C	500mL	
TV-755M	Nominal Viscosity: 9.5 cSt at 40°C, and 2.8 cSt at 100°C	Hydrocarbons	9.5 cSt at 40°C & 2.8 cSt at 100°C	500mL	
TV-1050M	Nominal Viscosity: 100 cSt at 40°C, and 16.8 cSt at 100°C	Hydrocarbons	100 cSt at 40°C, & 16.8 cSt at 100°C	500mL	
TV-1250M	Nominal Viscosity: 120 cSt at 40°C, and 19.5 cSt at 100°C	Hydrocarbons	120 cSt at 40°C, & 19.5 cSt at 100°C	500mL	
TV-1350M	Nominal Viscosity: 130 cSt at 40°C, and 20 cSt at 100°C	Hydrocarbons	130 cSt at 40°C, & 20 cSt at 100°C	500mL	
TV-1850M	Nominal Viscosity: 180 cSt at 40°C, and 26 cSt at 100°C	Hydrocarbons	180 cSt at 40°C, & 26 cSt at 100°C	500mL	
TV-3650M	Nominal Viscosity: 360 cSt at 40°C, and 42 cSt at 100°C	Hydrocarbons	360 cSt @ 40°C & 42 cSt @ 100°C	500mL	
TV-5050M	Nominal Viscosity: 520 cSt at 40°C, and 57 cSt at 100°C	Hydrocarbons	520 cSt at 40°C & 57 cSt at 100°C	500mL	
TV-9050M	Nominal Viscosity: 920 cSt at 40°C, and 84 cSt at 100°C	Hydrocarbons	920 cSt at 40°C & 84 cSt at 100°C	500mL	
Pour Point Reference Materials					
TPP-0525M	ASTM D97 - Typical Pour Point Range: -7°C to -3°C	Hydrocarbons	-9°C to -3°C	250mL	
TPP-125M	ASTM D97 - Typical Pour Point Range: -12°C to -8°C	Hydrocarbons	-12°C to -8°C	250mL	
TPP-1V25M	ASTM D97 - Typical Pour Point Range: -17°C to -13°C	Hydrocarbons	-17°C to -13°C	250mL	
TPP-225M	ASTM D97 - Typical Pour Point Range: -22°C to -18°C	Hydrocarbons	-22°C to -18°C	250mL	
TPP-425M	ASTM D97 - Typical Pour Point Range: -42°C to -36°C	Hydrocarbons	-42°C to -36°C	250mL	
TPP-525M	ASTM D97 - Typical Pour Point Range: -53°C to -47°C	Hydrocarbons	-53°C to -47°C	250mL	Y
Cloud Point Reference Materials					
TCC-0525M	ASTM D2500 - Typical Cloud Point Range: +3°C to +9°C	Hydrocarbons	3°C to 9°C	250mL	
TCC-0225M	ASTM D2500 - Typical Cloud Point Range: -4°C to 0°C	Hydrocarbons	-4°C to 0°C	250mL	
TCC-125M	ASTM D2500 - Typical Cloud Point Range: -12°C to -8°C	Hydrocarbons	-12°C to -8°C	250mL	
TCC-1V25M	ASTM D2500 - Typical Cloud Point Range: -17°C to -13°C	Hydrocarbons	-17°C to -13°C	250mL	
TCC-225M	ASTM D2500 - Typical Cloud Point Range: -22°C to -18°C	Hydrocarbons	-22°C to -18°C	250mL	
Freezing Point Reference Materials					
TFP-0125M	ASTM D2386 - Typical Freezing Point Range: -47°C to -42°C	Hydrocarbons	-47°C to -42°C	250mL	
TFP-0225M	ASTM D2386 - Typical Freezing Point Range: -52°C to -48°C	Hydrocarbons	-52°C to -48°C	250mL	Y

Part Number	Description	Matrix	Reference Values	Pack Size	Hazardous for Transport
Cold Filter Plug Point Reference Materials					
TCFPP-0125M	ASTM D6371/IP309 - Typical Plug Point Range: -20°C to -17°C	Hydrocarbons	-20°C to -17°C	250mL	
Biodiesel Standards					
TMB15-0510G	Metals in Biodiesel Standard: Ca, K, Mg, Na, P @ 5µg/g	B100 Biodiesel	Ca, K, Mg, Na, P @ 5µg/g	100g	
TMB15-110G	Metals in Biodiesel Standard: Ca, K, Mg, Na, P @ 10µg/g	B100 Biodiesel	Ca, K, Mg, Na, P @ 10µg/g	100g	
TMB15-1V10G	Metals in Biodiesel Standard: Ca, K, Mg, Na, P @ 15µg/g	B100 Biodiesel	Ca, K, Mg, Na, P @ 15µg/g	100g	
TMB15-210G	Metals in Biodiesel Standard: Ca, K, Mg, Na, P @ 20µg/g	B100 Biodiesel	Ca, K, Mg, Na, P @ 20µg/g	100g	
TB1S-0510	Sulfur @ 5µg/g	B100 Biodiesel	S @ 5µg/g	100mL	
TB1S-110	Sulfur @ 10µg/g	B100 Biodiesel	S @ 10µg/g	100mL	
TB1S-1V10	Sulfur @ 15µg/g	B100 Biodiesel	S @ 15µg/g	100mL	
TB1S-210	Sulfur @ 20µg/g	B100 Biodiesel	S @ 20µg/g	100mL	
TB1S-2V10	Sulfur @ 25µg/g	B100 Biodiesel	S @ 25µg/g	100mL	
TB1S-510	Sulfur @ 50µg/g	B100 Biodiesel	S @ 50µg/g	100mL	
TB1S-1010	Sulfur @ 100µg/g	B100 Biodiesel	S @ 100µg/g	100mL	
TB1S-5010	Sulfur @ 500µg/g	B100 Biodiesel	S @ 500µg/g	100mL	
TB1BL-10	Biodiesel Blank	B100 Biodiesel	S @ 0µg/g	100mL	
TB1BL-50	Biodiesel Blank	B100 Biodiesel	S @ 0µg/g	500mL	
TBDBBL-DF02	Biodiesel/Diesel Fuel Blends: 0% (v/v) Biodiesel	High Cetane Diesel Fuel	0% (v/v)	20mL	Y
TBDB02-DF02	Biodiesel/Diesel Fuel Blends: 2% (v/v) Biodiesel	High Cetane Diesel Fuel	2% (v/v)	20mL	Y
TBDB05-DF02	Biodiesel/Diesel Fuel Blends: 5% (v/v) Biodiesel	High Cetane Diesel Fuel	5% (v/v)	20mL	Y
TBDB1-DF02	Biodiesel/Diesel Fuel Blends: 10% (v/v) Biodiesel	High Cetane Diesel Fuel	10% (v/v)	20mL	Y
TBDB1V-DF02	Biodiesel/Diesel Fuel Blends: 15% (v/v) Biodiesel	High Cetane Diesel Fuel	15% (v/v)	20mL	Y
TBDB2-DF02	Biodiesel/Diesel Fuel Blends: 20% (v/v) Biodiesel	High Cetane Diesel Fuel	20% (v/v)	20mL	Y
TBDB2V-DF02	Biodiesel/Diesel Fuel Blends - 25% (v/v) Biodiesel	High Cetane Diesel Fuel	25% (v/v)	20mL	Y
TBDB3-DF02	Biodiesel/Diesel Fuel Blends - 30% (v/v) Biodiesel	High Cetane Diesel Fuel	30% (v/v)	20mL	Y
TBDB10-DF02	Biodiesel/Diesel Fuel Blends: 100% (v/v) Biodiesel	High Cetane Diesel Fuel	100% (v/v)	20mL	Y