



Nr sprawy: ZP.KL.03.03.2010 r.

Załącznik nr 2

**Szczegółowy opis przedmiotu zamówienia**

Przedmiotem zamówienia jest dostawa 115 rodzajów odczynników chemicznych o czystości od 95.00% do 99.99% do laboratorium INTiBS PAN, o wymaganiach zawartych w poniższej tabeli:

<b>Nazwa</b>	<b>Czystość</b>	<b>Wzór</b>	<b>Masa/ opakowania</b>
Lithium fluoride (anhydrous) w małych opakowaniach	99.99%	LiF	250 g / max 50 g
Lithium nitrate	99.98%	LiNO <sub>3</sub>	250 g
Sodium fluoride (anhydrous) w małych opakowaniach	99.99%	NaF	500 g / max 50 g
Sodium nitrate	99.98%	NaNO <sub>3</sub>	250 g
Potassium fluoride (anhydrous) w małych opakowaniach	99.99%	KF	500 g / max 50g
Potassium nitrate	99.98%	KNO <sub>3</sub>	250 g
Rubidium nitrate	99.98%	RbNO <sub>3</sub>	100 g
Beryllium sulfate tetrahydrate	99.99%	BeSO <sub>4</sub> 4H <sub>2</sub> O	100 g
Magnesium fluoride	99.99%	MgF <sub>2</sub>	250 g
Magnesium nitrate hexahydrate	99.97%	Mg(NO <sub>3</sub> ) <sub>2</sub> 6H <sub>2</sub> O	100 g
Magnesium oxide	99.99%	MgO	100 g



Calcium chloride	99.99%	CaCl <sub>2</sub>	100 g
Calcium carbonate	99.99%	CaCO <sub>3</sub>	250 g
Calcium fluoride	99.99%	CaF <sub>2</sub>	500 g
Calcium nitrate tetrahydrate	99.98%	Ca(NO <sub>3</sub> ) <sub>2</sub> 4H <sub>2</sub> O	100 g
Calcium oxide	99.99%	CaO	250 g
Calcium sulfide	99.90%	CaS	50 g
Strontium fluoride	99.99%	SrF <sub>2</sub>	500 g
Strontium nitrate	99.97%	Sr(NO <sub>3</sub> ) <sub>2</sub>	100 g
Strontium oxide	99.50%	SrO	200 g
Strontium hydroxide octahydrate	99.00%	Sr(OH) <sub>2</sub> 8H <sub>2</sub> O	500 g
Strontium sulfide	99.90%	SrS	50 g
Strontium sulfate	99.99%	SrSO <sub>4</sub>	25 g
Barium acetate	99.99%	Ba(CH <sub>3</sub> COO) <sub>2</sub>	100 g
Barium chloride	99.99%	BaCl <sub>2</sub>	200 g
Barium fluoride	99.99%	BaF <sub>2</sub>	500 g
Barium nitrate	99.95%	Ba(NO <sub>3</sub> ) <sub>2</sub>	100 g
Barium oxide	99.50%	BaO	100 g
Barium sulfate	99.99%	BaSO <sub>4</sub>	100 g
Scandium oxide	99.99%	Sc <sub>2</sub> O <sub>3</sub>	50 g
Yttrium acetate tetrahydrate	99.99%	Y(CH <sub>3</sub> COO) <sub>3</sub> 4H <sub>2</sub> O	100 g



Yttrium fluoride (anhydrous)	99.99%	$YF_3$	250 g
Yttrium nitrate hexahydrate	99.99%	$Y(NO_3)_3 \cdot 6H_2O$	100 g
Yttrium oxide	99.99%	$Y_2O_3$	1000 g
Lanthanum fluoride (anhydrous) w małych opakowaniach	99.99%	$LaF_3$	500 g / max 50 g
Lanthanum oxide	99.99%	$La_2O_3$	1000 g
Cerium(IV) oxide	99.99%	$CeO_2$	250 g
Praseodymium fluoride (anhydrous)	99.99%	$PrF_3$	50 g
Praseodymium(III,IV) oxide	99.99%	$Pr_6O_{11}$	200 g
Neodymium fluoride (anhydrous)	99.99%	$NdF_3$	100 g
Neodymium oxide	99.99%	$Nd_2O_3$	1000 g
Samarium fluoride (anhydrous) w małych opakowaniach	99.99%	$SmF_3$	250 g / max 25 g
Samarium oxide	99.99%	$Sm_2O_3$	200 g



Europium fluoride (anhydrous) w małych opakowaniach	99.99%	$\text{EuF}_3$	250 g /max 25g
Europium oxide	99.99%	$\text{Eu}_2\text{O}_3$	100 g
Gadolinium fluoride (anhydrous) w małych opakowaniach	99.99%	$\text{GdF}_3$	500 g /max 50g
Gadolinium oxide	99.99%	$\text{Gd}_2\text{O}_3$	1000 g
Terbium fluoride (anhydrous) w małych opakowaniach	99.99%	$\text{TbF}_3$	250 g / max 25 g
Terbium(III,IV) oxide	99.99%	$\text{Tb}_4\text{O}_7$	250 g
Dysprosium fluoride (anhydrous) w małych opakowaniach	99.99%	$\text{DyF}_3$	250 g / max 25 g
Dysprosium oxide	99.99%	$\text{Dy}_2\text{O}_3$	500 g
Holmium fluoride (anhydrous)	99.99%	$\text{HoF}_3$	50 g
Holmium oxide	99.99%	$\text{Ho}_2\text{O}_3$	100 g
Erbium fluoride (anhydrous)	99.99%	$\text{ErF}_3$	50 g
Erbium oxide	99.99%	$\text{Er}_2\text{O}_3$	250 g
Thulium fluoride (anhydrous)	99.99%	$\text{TmF}_3$	5 g
Thulium oxide	99.99%	$\text{Tm}_2\text{O}_3$	10 g



Ytterbium fluoride (anhydrous)	99.99%	YbF <sub>3</sub>	50 g
Ytterbium oxide	99.99%	Yb <sub>2</sub> O <sub>3</sub>	100 g
Lutetium fluoride	99.99%	LuF <sub>3</sub>	5 g
Lutetium oxide	99.99%	Lu <sub>2</sub> O <sub>3</sub>	25 g
Tantalum chloride	99.90%	TaCl <sub>5</sub>	100 g
Titanium(II) oxide	99.90%	TiO	50 g
Titanium(III) oxide	99.80%	Ti <sub>2</sub> O <sub>3</sub>	50 g
Titanium(IV) oxide	99.99%	TiO <sub>2</sub>	250 g
Titanium(IV) n-butoxide	98.00%	Ti[O(CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub> ] <sub>4</sub>	2000 g
Zirconium dinitrate oxide hydrate	99.90%	ZrO(NO <sub>3</sub> ) <sub>2</sub> •xH <sub>2</sub> O	100 g
Zirconium n-butoxide, 80% w/w in 1-butanol	80%	C <sub>16</sub> H <sub>36</sub> O <sub>4</sub> Zr	1000 g
Vanadium(V) oxide	99.99%	V <sub>2</sub> O <sub>5</sub>	50 g
Niobium(V) oxide	99.99%	Nb <sub>2</sub> O <sub>5</sub>	250 g
Chromium oxide	99.97%	Cr <sub>2</sub> O <sub>3</sub>	100 g
Molybdenum(VI) oxide	99.99%	MoO <sub>3</sub>	100 g
Tungsten(IV) oxide	99.9%	WO <sub>2</sub>	25 g
Tungsten(VI) oxide	99.99%	WO <sub>3</sub>	100 g



Manganese(II) oxide	99.99%	MnO	50 g
Manganese(IV) oxide	99.99%	MnO <sub>2</sub>	100 g
Cobalt(II) nitrate hexahydrate	98.00%	Co(NO <sub>3</sub> ) <sub>2</sub> 6H <sub>2</sub> O	100 g
Cobalt(II) oxide	99.99%	CoO	25 g
Nickel(II) nitrate hexahydrate	99.99%	Ni(NO <sub>3</sub> ) <sub>2</sub> 6H <sub>2</sub> O	50 g
Nickel(II) oxide	99.99%	NiO	100 g
Copper(I) chloride	99.00%	CuCl	100 g
Copper(II) chloride	99.99%	CuCl <sub>2</sub>	25 g
Copper(II) fluoride	99.99%	CuF <sub>2</sub>	100 g
Copper(I) oxide	99.90%	Cu <sub>2</sub> O	100 g
Copper(II) oxide	99.99%	CuO	100 g
Copper(I) sulfide	99.5%	Cu <sub>2</sub> S	50 g
Silver(I) sulfide	99.99%	Ag <sub>2</sub> S	5 g
Zinc nitrate hexahydrate	99.99%	Zn(NO <sub>3</sub> ) <sub>2</sub> 6H <sub>2</sub> O	50 g
Zinc oxide	99.99%	ZnO	250 g
Zinc sulfide	99.99%	ZnS	250 g
Cadmium nitrate tetrahydrate	99.99%	Cd(NO <sub>3</sub> ) <sub>2</sub> 4H <sub>2</sub> O	100 g
Cadmium oxide	99.99%	CdO	500 g
Cadmium sulfide	99.99%	CdS	25 g



Boron oxide	99.98%	B <sub>2</sub> O <sub>3</sub>	500 g
Gallium(III) chloride	99.99%	GaCl <sub>3</sub>	50 g
Gallium(III) oxide	99.99%	Ga <sub>2</sub> O <sub>3</sub>	100 g
Indium(III) chloride	99.99%	InCl <sub>3</sub>	50 g
Indium(III) oxide	99.99%	In <sub>2</sub> O <sub>3</sub>	50 g
Tetraethoxysilane	99.90%	Si(OC <sub>2</sub> H <sub>5</sub> ) <sub>4</sub>	2000 g
Germanium(IV) oxide	99.99%	GeO <sub>2</sub>	100 g
Tin(IV) oxide,	99.9%	SnO <sub>2</sub>	100 g
Di-n-butyltin bis(2,4-pentanedionate)	95.00%	Sn(C <sub>5</sub> H <sub>7</sub> O <sub>2</sub> ) <sub>2</sub> (n-C <sub>4</sub> H <sub>9</sub> ) <sub>2</sub>	250 g
Lead(IV) acetate	96.00%	Pb(CH <sub>3</sub> COO) <sub>4</sub>	250 g
Lead(II) fluoride	99.99%	PbF <sub>2</sub>	100 g
Lead(II) oxide	99.99%	PbO	100 g
Lead(II) sulfate	99.99%	PbSO <sub>4</sub>	50 g
Lead(II) chloride	99.99%	PbCl <sub>2</sub>	100 g
Phosphorus (V) oxide	99.99%	P <sub>2</sub> O <sub>5</sub>	500 g
Phosphorus (V) oxide	min 90%	P <sub>2</sub> O <sub>5</sub>	2500 g / 500g
Antimony(III) chloride	99.90%	SbCl <sub>3</sub>	100 g



Antimony(III) oxide	99.99%	Sb <sub>2</sub> O <sub>3</sub>	100 g
Bismuth(III) oxide	99.99%	Bi <sub>2</sub> O <sub>3</sub>	250 g
Bismuth(III) oxide carbonate	98.50%	(BiO) <sub>2</sub> CO <sub>3</sub>	500 g
Polyvinylpyrrolidone, average M.W. 58,000		(C <sub>6</sub> H <sub>9</sub> NO) <sub>n</sub>	2500 g
2-Methoxyethanol,	99%	C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>	2500 ml

**Oraz innych niżej wymienionych związków chemicznych:**

Glikol etylenowy cz.d.a	1 l x 6
1,4-butanodiol, 99+%	1 l
Kwas cytrynowy bezwodny do analizy ACS, 99.6%	4 kg
Amoniak roztwór 25% (woda amoniakalna) ekstra czysty	2.5 l
Kwas azotowy 65% cz.d.a	1 l
Kwas azotowy 65% ultraczysty	2 l
Amonu wodorowęglan cz.d.a.	1 kg
Kwas octowy min. 99,5% CZDA	2 l
Kwas wersenowy (EDTA) do analizy, 99,5%	1 kg
Bromek potasu do spektroskopii, 99+%	100 g
Glicyna, cz.d.a	1 kg
Alkohol etylowy 96% cz.d.a.	0.5 l x 6
Metanol cz.d.a.	2 l
Aceton cz.	1 l x 6
Aceton cz.d.a.	2 l
Kwas solny 35 - 38% CZDA	1 l x 6





Acetyloaceton, cz.d.a.

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di-Sodu tetraboran 10. Hydrat CZDA, ACS

500 g