Sr	Description	Specification		A/U	Qty
1	Acetone	(a)Appearance	Clear and Colourless (Liquid)	Kg	78000
		(b)Concentration	min: 98 % by wt:		
		(c)Boiling point	55 – 58.9°C		
		(d)Density(20°C)	0.79 – 0.80		
		(e)Oxidizing substance	None		
		(f)Residue	max: 0.001 %		
		(g)Acidity	max: 0.005 %		
2	Bone Glue	(a)Appearance	Semi-transparent & slightly	Kg	250
			bright flakes or grains with		
			brown-yellow colour, free of		
			mildew and stink		
		(b)Water Content	< 16 %		
		(c)Ash Content	< 2.2 %		
		(d)Vecosity, 12.5% absolute dry glue, 60°C	> 20 mPa.s		
		(e)Chloride (as chlorine)	< 0.6		
		(f)pH value	5.5 ~ 7.0		
3	Calcium Carbonate	(a)Appearance	White without visible impurities	Kg	1500
		(b)Specific Gravity	2.7 – 2.95		
		(c)Purity	min 99 % by wt:		
		(d)Loss in weight (at 100°C)	max: 0.2%		
		(e)pH Value	10		
4	Calcium Chloride,	(a)Quality	Technically Pure, Readily	Kg	1000
	Anhydrous		Soluble in Water, White Deliquesent		
			crystal, Granules lump or Flake		
		(b)Purity	min: 70%		
		(c)Chlorate	Free		
		(d)Magnesium	max: 0.5%		
		(e)Common salt	max: 0.5%		
		(f)Particle Size	No Fine grain smaller than 2mm		
		(g)Specific gravity 25 °C	2.15		
		(h)Melting Point	772 °C		
		(i)Boiling Point	min:1600 °C		
5	Centralite II	(a)Appearance	Yellow Solid	Kg	3000
	(Stabilizer-2)	(b)Moisture	Below 0.5%		
		(c)Aniline	Below 0.25%		
		(d)Reaction	Neutral		
		(e)Insoluble in Alcohol	Below 0.09%		
		(f)Ash Content	Below 0.09%		
		(g)Freezing Point	119 °C and Over		

Sr	Description	Specification		A/U	Qty
6	China Chemical Linter	(a)Appearance	Flinsy without Hard Knobs	Kg	150000
	(Linter P-500)	(b)Quality	Bleached		
		(c)Cellulose	min : 98 %		
		(d)Viscosity	10 ~ 40 Cp		
		(e)Ash Content	max: 0.15 %		
		(f)Water Content	max: 6 %		
		(g)Hygroscopicity	min: 110 gm		
		(h)Sulphuric Acid Insoluble Content	max: 0.5 %		
		(i)Copper Value	max: 0.3 %		
		(j)Fiber Length 2.5 ~ 6 mm	85%		
7	Dibutylphthalate	(a)Appearance	Colourless oily liquid	Kg	3000
			not darker than standard		
		(b)Ester content as	min: 99.00 %		
		dibutylphathalate			
		(c)Purity by ester phthalic	min: 99.1 %		
		(d)Density (20°C)	1.044 – 1.054		
		(e)Acidity as phthalic acid	max: 0.03 %		
		(f)Boiling point	340 °C		
		(g)Flash point	171 °C		
8	Dinitrotoluene 68°C	(a)Melting Point	68 ± 2.5 °C	Kg	3000
		(b)Moisture	max: 0.25%		
		(c)Matter insoluble in	max: 0.2 %		
		Benzene or Methylene			
		(d)Acidity as H_2SO_4	± 0.005%		
		(e)Alkality	None		
		(f)Sulphate	Free		
		(g)Ash	max: 0.15%		
		(h)Abel Heat Test at 80°C	30 mins		
9	Dipenta	(a)Moisture	1.00%	Kg	300
		(b)Ash	0.05%		
		(c)Melting Point	220 – 230 °C		
		(d)Bulk Density	0.66 g/cc		
10	Diphenylamine	(a)Appearance	White to light yellow or grey	Kg	3000
			crystal without mechanical impurities		
		(b)Solidification point	51.7 – 53 ° C		
		(c)Boiling point	302 °C		
		(d)Density	1.159 gm/cc		
		(e)Moisture	max: 0.2 %		
		(f)Ash	max: 0.05 %		
		(g)Matter insoluble in alcohol	max 0.01 %		
		(h)Matter Insoluble in ether-alcohol	Free		
		(i)Purity	min 97.5 %		
		(j)Melting point	52.8 – 53.0 °C		
		(k)Reaction	Neutral		

Sr	Description	Specification		A/U	Qty
11	Ethyl Acetate	(a)Appearance	Transparent liquid without suspensions	Kg	35000
		(b)Color(platinum–cobalt)	< 20 number		
		(c)Density (20 °C)	0.896~0.902		
		(d)Ethyl acetate	> 97.00 %		
		(e)Moisture content	< 0.40 %		
		(f)Residues after evaporation	< 0.010 %		
12	Gelatin	(a)Appearance	Yellow and brown grains	Kg	1000
		(b)Viscosity (15% absolutely dry gelatin solution, 40°C)	> 7.0 °E		
		(c)Congealing concentration	< 1.4 %		
		(d)Water content	< 16.0 %		
		(e)Ash content	< 2.0 %		
		(f)Insolubles	< 0.5 %		
13	Glycerine Pure (Nitration Grade)	(a)Origin	Synthetic Glycerine (1st Priority) Glycerine from Fish fats must be absolutely excluded.	Kg	2000
		(b)Appearance	Clear and free of suspended matters		
		(c)Odour	Pleasant even at 100degC and after addition of water or diluted sulphuric acid.		
		(d)Colour	Water white or slightly yellow, through a thickness of at least 10 cm, even after addition of ammonium sulphide. It must not be come turbid when lead acetate added.		
		(e)Purity	min: 98.80% by dichromate method. A concentration of 99.3% should be considered as normal		
		(f)Chloride	max: 0.01% as NaCl		
		(g)Sulphate	Traces		
		(h)Calcium	Traces		
		(i)Ash	max: 0.05%		
		(j)Moisture content	max:1.00% the total of water plus glycerol must given at least 99.8%		
		(k)Soluble in H_2O	In all proportions with water the solution must be perfectly clear.		
		(l)Specific gravity 15°C	min: 1.262 %		
		(m)Reaction	Neutral, for 50 ml of glycerine mixed with 100 ml CO_2 free distilled water, and 0.5 ml Phenolphthalein, not more than 0.3 ml 1 N HCL or 0.3ml 1N NaOH should be used for neutralization.		
		(n)Acidity or Alkalinity	50 ml, shall require not more than 0.30 ml. of N,HCl /of N NaOH for neutralization		
		(o)Saponification equivalent	max: 0.06 % as Na_2O		
		(p)Reducing substance	There is no appreciable darkening of colour with glycerine.		
		(q)Fatty acid	None.		
		(r)Refractive index	1.4740		
		(s)Abel test	min: 30 mins		

Sr	Description	Specification		A/U	Qty
14	Graphite	(a)Appearance	Gray or dark black scales	Kg	300
		(b)Fixed carbon	> 98.0 %		
		(c)Moisture content	< 0.3 %		
		(d)Ash content	< 1.5 %		
		(e)Volatiles	< 0.5 %		
		(f)Sulfur	< 0.1 %		
		(g)pH value of water extract	7 ~ 8		
		(h)Sand & other hard sludge	Nil		
		(i)Grain size(<150um)	> 99.5 %		
		(j)Grain size(<45um)	> 95.0 %		
15	Lead Oxide	(a)Appearance	Light Yellow	Kg	2000
		(b)Material Insoluble in Acetic Acid	Less than 2 %		
		(c)Content of Lead Oxide	More than 98%		
		(d)Grain Size	Residue on Screen 1600 mesh/cm^2		
			Less than 5 %		
16	Magnesium Nitrate	(a)Purity	min: 98.00 %	Kg	4000
		(b)Chloride Content	max: 200 ppm		
		(c)Sulphate Content	max: 300 ppm		
		(d)Iron (Fe)	max: 10 ppm		
17	Orthomononitro	(a) Purity	99.80%	Kg	5000
	Toluene (OMNT)	(b) Content of m-MNT	0.50%		
		(c) Content of p-MNT	0.50%		
		(d) Content of DNT	0%		
		(e) Moisture	0.10%		
		(f) Ash Content	0.05%		
		(g) S.P to Modification	- 9.3°C		
		(h) Specific Gravity (20°C)	163		
		(i) Boiling Point	222°C		
		(j) Flash Point	95°C		
		(k)Refractive Index at 20.4°C	1.54739		
		(l)Solubility in Water at 30°C	0.065 g		
		per 100g			
18	Pentaerythritol	(a)Appearance	Purely white crystalline, free	Kg	30000
			flowing without visible impurities		
		(b)Ash	max: 0.2%		
		(c)Moisture	max: 0.1%		
		(d)Melting Point	min: 243 Deg:C		
		(e)Hydroxyl Content	min: 49%		
		(f)Pentaerythritol content	min: 98%		
		(g)Dipentaerythritol content	1.3%		
		(h)Tripentaerythritol content	max: 0.1%		
		(i)Bispentaerythritol content	max: 1.0%		
		(j)Dust(100 micron)	max: 2%		
		(k)Solubility	At 20 Deg:C - 6g		
		(100cm3 of water)	50 Deg:C - 17g		
			95 Deg:C - 72g		
		(l)Sieve analysis			
		0.5mm	100% (Through)		
		0.1mm	2% (Through)		

Sr	Description	Specification		A/U	Qty
19	Potassium Nitrate	(a)Appearance	Transparent, colourless	Kg	500
			white crystal		
		(b)Purity	min: 99 %		
		(c)Chloride (as NH_4)	max: 0.07 %		
		(d)Sulphate	max: 0.02 %		
		(e)Ammonium (as NH_4)	max: 0.005 %		
		(f)Iron (Fe)	max: 0.001 %		
		(g)Sodium (Na)	max: 0.05 %		
		(h)Arsenic	max: 0.0001 %		
		(i)Insoluble in water	max; 0.01 %		
		(j)Moisture	max: 0.2 %		
		(k)Reaction	Neutral		
		(l)pH Value	5 – 8		
		(m)Specitic gravity	2.11		
		(n)Melting point	337 Deg:C		
		(o)Boiling Point	400 Deg:C		
		(p)Size pass			
		200 mesh	100 % (through)		
20	Potassium Sulphate	(a)Appearance	White Powder	Kg	10
		(b)Purity	min: 99 %		
		(c)Moisture content	max: 1 %		
		(d)Matter insoluble in water	max: 0.1 %		
		(e)Chloride	max: 0.02 %		
		(f)Reaction	Neutral		
		(g)Alkalinity as KOH	max: 0.03 %		
		(h)Acidity as H_2SO_4	max: 0.01 %		
		(i)Iron	max: 0.2 %		
		(j)Sieve Test 0.3mm screen	100 % (through)		
21	Silicon Oil	(a)Durability	Several Years	Kg	500
		(b)Appearance	Colourless, Viscous Liquid		
		(c)Density at 25°C	0.97 gm/cm3		
		0.5mm	2 % (through)		
		(d)Viscosity at 25°C	12500 Cst		
22	Sodium Carbonate	(a)Appearance	White Fine Powder	Kg	13000
	(Soda Ash)	(b)Purity	min: 98%		
		(c)Insoluble in water	max: 0.1 %		
		(d)Moisture	max:1.0%		
		(e)Bulk Density	0.6 – 0.7gm/cc		
		(f)Abel Test	min:30 mins		
23	Sodium Chloride	(a)Sodium chloride	> 95.50 %	Kg	50000
		(b)Water content	< 3.30 %		
		(c)Water insolubles	< 0.20 %		
		(d)Water-soluble impurities	< 1.00 %		

Sr	Description	Specification		A/U	Qty
24	Sodium Hydrogen	(a)Appearance	White Crystalline Powder, Fine	Kg	500
	Carbonate	(b)Purity	min: 98%		
		(c)Specific gravity	2.159 gm/cc		
		(d)Solubility	Soluble in water, insoluble in alcohol		
		(e)Chloride	max: 0.3%		
		(f)Fe	max: 0.005%		
		(g)SO4	max: 0.05%		
		(h)Melting Point	270 Deg:C		
		(i)Refractive index	1.5		
25	Sodium Pyrosulphite	(a)Quality	Dry Technically Pure	Kg	2000
		(b)SO_2 Content	approx:64 – 66 %		
26	Sodium Sulphate	(a)Sodium sulphate content(Na_2SO_4)	> 97 %	Kg	300
		(b)Water-insolubles	< 0.10 %		
		(c)Total Ca & Mg content (as Mg)	< 0.30 %		
		(d)Iron(as Fe)	< 0.005 %		
		(e)Moisture content	< 0.50 %		
		(f)pH value	6 ~ 8		
		(g)Tails on sieve	0 (20-mesh) < 2 (40-mesh)		
27	Sodium Thiosulphate	(a)Purity	max:98%	Kg	300
	$Na_2S_2O_3$				
28	Toluene	(a)Appearance	Clear Colourless or slightly	Kg	12000
			yellow not darker than 0.003 gm		
			$KMnO_4$ solution		
		(b)Density (g/cc)	0.869 – 0.873 (15 Deg:C)		
			0.866 (20 Deg:C)		
		(c)Distillation Temperature	109 – 111 Deg:C		
		(d)Ash content	0.01 % max		
		(e)Acidity	Neutral		
		(f)Unsaturated components	max; 0.25 gm Br^2 / 100ml		
		(bromine Index)			
		(g)Residue	None		
		(h)Refractive Index (20°C)	1.497		
		(i)Extraneous organic matter	The liquid must not adopta		
			brown colour		
29	Vaseline	(a)Falling Point	37 – 50 Deg:C	Kg	2000
		(b)Viscosity at 60Deg:C	More than 11.0 cp (2 E')		
		(c)Acidity	Less than 0.28 Mg/g		
		(d)Ash	Less than 0.03 %		
		(e)Other(Miscellaneous things)	Less than 0.025 %		
		(f)Volatile matter	Less than 0.5 %		
		(g)Moisture	-		
		(h)Reaction	Neutral		
30	Zinc Steatrate	(a)Appearance	White Powder	Kg	100
	(Zinc Stearic Acid)	(b)Acidity	3 max: MgKOH/g		
		(c)Moisture	2 max: %		
		(d)Alkalinity	-		
		(e)Cl	0.1 max: %		
			(Not More blurred than std; colour)		
		(f)SO_4	Light Milky colour is permissible		

Sr	Description	Specification		A/U	Qty
31	Oil Yellow	(a)Appearance	Orange Yellow With Viscosity,	Kg	150
			no Visual Coarse Powder Particle of		
			Mechanical Impurity.		
		(b)Shade (Compare With Standard Product)	(Standard Product) 95~105		
		Approximition Coloring Power %			
		(c)Light Resistance	Grade 1		
		(d)Alcohol Solubility	Micro-solubility		
32	Sodium Hydroxide	(a)Appearance	White With Luster,	Kg	400000
			Allowing Slight Color,		
			no Visual Mechanical Impurity.		
		(b)Sodium Hydroxide (%)	≥ 96.0		
		(c)Sodium Carbonate (%)	≤ 2.5		
		(d)Sodium Chloride (%)	≤ 1.4		
		(e)Iron Trioxite (%)	≤ 0.01		
		(f)Silicon Dioxide (%)	≤ 0.60		
33	Sodium Stearate	(a)Appearance	No visual mechanical impurity.	Kg	100
		(b)Na_2O Content ,%	9.6~10.6		
		(c)Content of impurity	(1) drying weight loss ,% ≤ 2		
			(2) free acid (as stearic acid)% ≤ 0.5		
			(3) Chloride ,% ≤ 0.02		
34	Anhydrous $CaCl_2$	(a)Appearance	White particles,	Kg	150
			without visual mechanical impurity.		
		(b)$CaCl_2$ Content %	≥ 96.0		
		(c)Alkalinity [$Ca(OH)_2$] %	≤ 0.020		
		(d)Insoluble and deposit matter of	≤ 0.015		
		Ammonium hydroxide %			
		(e)Phosphate (PO_4^{3-})%	≤ 0.003		
		(f)Sulfate(SO_4^{2-})%	≤ 0.020		
		(g)Heavy metal(Pb)%	≤ 0.001		
		(h)Iron (Fe)%	≤ 0.001		
		(i)Zinc (Zn) %	≤ 0.001		
		(j)Magnesiun and alkali metal (Sulfate),%	≤ 0.020		
		(k)Arsenic (As)%	≤ 0.0003		
		(l)Nitrate (NO_3) %	Qualified		
		(m)Barium(Ba)	Qualified		
35	Benzene	(a)Color	No Darker than 20	Kg	300
		(b)Density	876 ~ 881 Kg / m^3		
		(c)Distillation Range	79.6 °C ~ 80.5 °C		
		(d)Crystal Point	≥ 5.00 °C		
36	Activated Carbon	(a)Granulatity (mesh)	8~16	Kg	1500
		(b)Mechanical Strength %	< 90		
		(c)Iodine Value,mg/g	≥ 900		
		(d)Moisture %	< 5		
		(e)Specific Area,m^2 /g	800-900		
		(f)Benzene Adsorption mg/g	< 120		

Sr	Description	Specification		A/U	Qty
37	Calcium Hypochloride	(a)Appearance	Free flowing white colour	Kg	200
			granular material		
		(b)Solubility	30g/l		
		(c)Moisture content (w/w)	5% max		
		(d)Insoluble matter in water(w/w)	2.5 %max		
		(e)Minium available chloride(w/w)	65%		
		(f)Maximum total alkalinity (as $CaCO_3$) (w/w)	6%		
		(g)Maximum sodium chloride (w/w)	18%		
38	Poly-aluminium Chloride	(a)Alternate name	PAC	Kg	200
		(b)Chemical	$Al(OH)1.5(SO_4)0.125Cl1.25$		
		(c)Molecular Weight	108.79		
		(d)Water-Soluble aluminium of			
		Not less than 14 ± 0.3% w/w as			
		Al; or 30% w/w as $Al_2 O_3$			
39	Sodium Tripolyphosphate	(a)Chemical formula	$Na_5P_3O_{10}$	Kg	50
		(b)Industrial Grade	99.90%		
40	EDTA (Tetra Sodium Salt)	(a)Chemical formula	$C_{10}H_{16}N_2O_8$	Kg	50
		(b)Industrial Grade	99.90%		
41	Citric Acid	Chemical formula	$C_6H_8O_7H_2O$	Kg	1000