भाग ५

नेपाल सरकार कृषि तथा पशुपन्छी विकास मन्त्रालयको सूचना

नेपाल सरकार, कृषि तथा पशुपन्छी विकास मन्त्रालयले रासायनिक मल (नियन्त्रण) आदेश, २०५५ को दफा ३५ ले दिएको अधिकार प्रयोग गरी सो आदेशको अनुसूची-१ को सट्टा देहायको अनुसूची-१ राखी हेरफेर गरेकोले यो सूचना प्रकाशन गरिएको छ ।

"अनुसूची-१

(दफा ५ को उपदफा (१) सँग सम्बन्धित) <u>रासायनिक मलको स्पेसिफिकेसन</u>

1. Ammonium Molybdate (NH₄)₆Mo₇O₂₄4H₂O

I. Am	monium Molybdate (NH ₄) ₆ M	070	_{24.} 4H ₂ O	
S.No.	CHARACTERISTICS		REQUIREMENT	TS.
1	PHYSICAL CONDITION 1.1 Description	•	Free crystalline/powder.	flowing
2	CHEMICAL COMPOSITION 2.1 Molybdenum (as Mo), percent by weight, minimum 2.2 Lead (as Pb), percent by weight, maximum 2.3 Matter insoluble in water, percent by weight, maximum 2.4 Cadmium(as Cd)		52.0 0.003 1.0 0.0025 0.10 5.0-5.5	

	percent by weight, maximum 2.5 Arsenic (as As) percent by weight, maximum 2.6 pH	
3	Others	Labeling and packaging as per the manufacture's specification.

2. Am	monium Phosphate Sulphate	(20-20-0)
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION	
	1.1 Description	Granulated form, granule
		size 2-4 mm (80-90%)
	1.2 Particle size	Not less than 90 % of the
		material shall pass through 4
		mm IS sieve and shall be
		retained on 1 mm IS Sieve.
		Not more than 5% shall be
		below 1 mm IS sieve.
2.	CHEMICAL	
	COMPOSITION	1.0
	2.1 Moisture percent by	20.0
	weight, maximum.	
	2.2 Total Nitrogen, percent	18.0
	(ammoniacal and	1000
	nitrate) by weight,	2.0
	minimum	
	2.3 Ammoniacal nitrogen	20.0
	percent by weight,	
	minimum	
	2.4 N in the form of Urea	17.0
	percent by weight,	
	maximum	13.0
	2.5 Neutral ammonium	
	citrate soluble	
	phosphates (as P ₂ O ₅)	

	percent by weight, minimum. 2.6 Water soluble phosphates (as P ₂ O ₅) percent by weight minimum 2.7 Sulphur (as S) percent by weight, minimum	
3	Others	Certificate from an independent surveyor or a recognized Government laboratory showing there is no contamination with radioactive material.

3. Ammonium Phosphate Sulphate Nitrate (20-20-0)

3. Am	monium Phosphate Sulphate	Nitrate (20-20-0)
S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION	
	1.1 Description	 Granulated form, granule size 2-4 mm (80-90%). Not less than 90 per cent of
	1.2 Particle size	the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 percent shall be below 1 mm IS sieve.
2	CHEMICAL	
	COMPOSITION	
	2.1 Moisture, percent by	1.5
	weight, maximum	20.0
	2.2 Total nitrogen, (ammoniacal and	18.0
	nitrate) percent by	16.0

	weight, minimum	2.0
	2.3 Ammoniacal nitrogen, percent by weight, minimum	20.0
	2.4 Nitrate nitrogen, percent by weight, maximum	17.0
	2.5 Neutral ammonium citrate soluble	13.0
	phosphates (as P ₂ O ₅), percent by weight, minimum	
	2.6 Water soluble phosphates (as P ₂ O ₅) percent by weight, minimum	
	2.7 Sulphur (as S), percent by weight, minimum	
3	Others	 Certificate from an independent surveyor or a recognized government laboratory showing there is no contamination with
		radioactive material.

4. Ami	nonium Sulphate (21–0–0)	
S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION	
	1.1 Description	White or yellowish white
		Crystallized
	1.2 Form	Not less than 90 percent of
	1.3 Particle size	the material shall pass
		through 2.8 mm IS sieve and
		be retained on 1 mm IS
		sieve. Not more than 5
		percent shall be below 1 mm
		IS sieve.

2	CHEMICAL COMPOSITION 2.1 Moisture, percent by weight, maximum 2.2 Ammoniacal nitrogen, percent by weight, minimum 2.3Total nitrogen, percent byweight, minimum 2.4 Free acidity (as H ₂ SO ₄), percent by weight, maximum (0.04 for materials obtained from by-product ammonia and by-product gypsum) 2.5 Arsenic (as AS ₂ O ₃), percent by weight, maximum 2.6 Sulphur (as S), percent by weight, minimum	1.0 20.5 21 0.025 0.01 23.0
3	Others	Certificate from an independent surveyor or a recognized government laboratory showing there is no contamination with radioactive material.

5. Borax (Sodium Tetraborate) ($Na_2B_4O_{7.}10H_2O$) for soil application

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	CHEMICAL	12
	COMPOSITION	10.5
	1.1 Content of Boron (as	
	B) percent by weight,	1.0
	minimum	15 m m m m m
	1.2 Matter insoluble in	0.003
	water percent by	9.0 - 9.5
	weight, maximum	0.0025
	1.3 Lead (as Pb) percent	22.22
	by weight, maximum	0.01

	1.4 p ^H (3.8% solution) not less than 1.5 Cadmium (as Cd) percent by weight, maximum 1.6 Arsenic(as As) percent by weight, maximum	-/C
2.	Others	 Labelling and packaging as per the manufacturer's specification.

6. Calcium Ammonium Nitrate (25-0-0)

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description 1.2 Form	Not less than 80 percent of the material should pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 10 percent shall be below 1 mm IS sieve.
2.	CHEMICAL COMPOSITION 2.1 Total ammoniacal and nitrate nitrogen percent by weight, minimum 2.2 Ammoniacal nitrogen percent by weight, minimum 2.3 Calcium nitrate percent by weight, maximum 2.4 Moisture percent by weight, maximum	25.0 12.5 0.5 1.0
3.	Others	Labelling and packaging as per the manufacturer's specification.

7. Calcium Ammonium Nitrate (26-0-0)

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description 1.2 Form	Not less than 90 percent of the material should pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 10 percent shall be below 1 mm IS sieve.
2.	CHEMICAL COMPOSITION 2.1 Total ammoniacal and nitrate nitrogen percent by weight, minimum 2.2 Ammoniacal nitrogen percent by weight, minimum 2.3 Calcium nitrate percent by weight, maximum 2.4 Moisture percent by weight, maximum	26.0 13.0 0.5 1.0
3.	Others	Labelling and packaging as per the manufacturer's specification.

8. Chelated Iron as Fe-EDTA

S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION 1.1 Description 1.2 Form	Free flowingCrystalline or powder
2	CHEMICAL COMPOSITION 2.1 Iron content (as Fe), percent by weight, minimum 2.2 Lead (as Pb), percent by weight, maximum 2.3 pH	12.0 0.003 5.5-6.5

3	3	Others	 Labeling and packaging as per the manufacture's specification.

9. Chelated Zinc as Zn – EDTA

S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION 1.1 Description 1.2 Form	 Free flowing Crystalline or powder or tablet.
2	CHEMICAL COMPOSITION 2.1 Zinc content (as Zn), percent by weight, minimum 2.2 Lead (as Pb), percent by weight, maximum 2.3 pH	0.003 6.0-6.5
3	Others	Labeling and packaging as per the manufacture's specification.

10. Copper Sulphate (CuSO_{4.5}H₂O)

10. Co	pper Sulphate (CuSO ₄ .5H ₂ O)	
S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION 1.1 Description	Free flowing powder/granular.
2	CHEMICAL COMPOSITION 2.1 Copper (as Cu), percent by weight, minimum 2.2 Soluble iron and	24.0 0.5
	aluminum compounds (expressed as Fe), percent by weight, maximum 2.3 Lead (as Pb), percent	0.003 1.0 12.0 3.0

	by weight, maximum 2.4 Matter insoluble in water, percent by weight, maximum 2.5 Sulphur (as S), percent by weight, minimum 2.6 pH (5% solution) not less than	-\cc
3	Others	Labeling and packaging as per the manufacture's specification.

11.Dian	11.Diammonium Phosphate (18-46-0)		
S.No.	CHARACTERISTICS	REQUIREMENTS	
1.	PHYSICAL CONDITION		
	1.1 Description	Free flowing granules	
		90% of the material shall pass	
	1.2 Particle size	through a 4 mm IS sieve and	
		shall be retained on a 1 mm IS	
		sieve. Not more than 5% shall	
		be below than 1 mm size.	
2.	CHEMICAL		
	COMPOSITION	18.0	
	2.1 Total nitrogen, percent	15.5	
	by weight, minimum		
	2.2 Ammoniacal nitrogen	2.5	
	form, percent by		
	weight, minimum	41.0	
	2.3 Total nitrogen in the		
	form of Urea per cent	46.0	
	by weight, maximum		
	2.4 Water soluble		
	phosphates (as P_2O_5),	2.5	
	per cent by weight,		
	minimum		
	2.5Neutral Ammonium		
	Citrate soluble		
	phosphates (as P_2O_5),		
	percent by weight,		

	minimum 2.6 Moisture, percent by weight, maximum	
3	Others	Certificate from an independent surveyor or a recognized Government laboratory showing there is no contamination with radio active material.

12.Diam	2.Diammonium Phosphate (16-44-0)		
S.No.	CHARACTERISTICS	REQUIREMENTS	
1.	PHYSICAL CONDITION 1.1 Description 1.2 Particle size	 Free flowing granules 90% of the material shall pass through a 4 mm IS sieve and shall be retained on a 1 mm IS sieve. Not more than 5% shall be below than 1 mm size. 	
2.	CHEMICAL COMPOSITION 2.1 Total nitrogen, percent by weight, minimum 2.2Total phosphates (as P ₂ O ₅), percent by weight, minimum 2.3 Moisture, percent by weight, maximum	16.0 44.0 2.5	
3	Others	Certificate from an independent surveyor or a recognized Government laboratory showing there is no contamination with radioactive material.	

13. Ferrous Sulphate (FeSO₄.7H₂O)

15. Fe	13. Ferrous Sulphate (FeSO ₄ ./H ₂ O)		
S.No.	CHARACTERISTICS	REQUIREMENTS	
1	PHYSICAL CONDITION 1.1 Description	Free flowing powder form.	
2	CHEMICAL COMPOSITION 2.1 Ferrous iron (as Fe), percent by weight minimum 2.2 Sulphur (as S), percent by weight, minimum 2.3 Free acid (as H ₂ SO ₄), percent by weight, maximum 2.4 Ferric Iron (as Fe), percent by weight, maximum 2.5 Lead (as Pb), percent by weight, maximum 2.6 Matter insoluble in water, percent by weight, maximum	19.0 10.5 1.0 0.5 0.003 1.0 3.5	
	2.7 pH not less than		
3		 Labeling and packaging as per the manufacture's specification. 	

14. Manganese Sulphate

1 10 1716	1 11 Manganese Sulphate	
S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION 1.1 Description	Free flowing form.

2	CHEMICAL	
	COMPOSITION	
	2.1 Manganese (as Mn),	30.5
	percent by weight,	
	minimum	0.003
	2.2 Lead (as Pb), percent	0.1
	by weight, maximum	2.0
	2.3 Copper (as Cu), percent	
	by weight, maximum	1.2
	2.4 Magnesium (as Mg),	
	percent by weight,	17.0
	maximum	4.0
	2.5 Matter insoluble in	
	water, percent by	
	weight, maximum	
	2.6 Sulphur (as S), percent	
	by weight, minimum	
	2.7 pH (5% solution) not	
	less than	
3	Others	Labeling and packaging as per
		the manufacture's specification.
		,

15. Mono Ammonium Phosphate(11:52:0)

15. IVI0	15. Wiono Ammonium Phosphate(11:52:0)		
S.No.	CHARACTERISTICS	REQUIREMENTS	
1.	PHYSICAL CONDITION		
	1.1 Description	 Free flowing granules 	
	1.2 Particle size	90% of the material shall pass through a 4 mm IS sieve and shall be retained	
		on a 1 mm IS sieve. Not more than 5% shall be below than 1 mm size.	

	,	
2.	CHEMICAL COMPOSITION	11.0
	2.1 Total nitrogen, all in	11.0
	ammoniacal form	52.0
	percent by weight,	44.5
	minimum 2.2 Available phosphorus	44.5
	(as P_2O_5), percent by	1.0
	weight, minimum	
	2.3 Water soluble	
	phosphorus (as	
	P ₂ O ₅), percent by weight, minimum	
	2.4 Moisture, percent by	
	weight, maximum	
3	Others	• Certificate from an
		independent surveyor or a recognized Government
		laboratory showing there is
		no contamination with
		radioactive material.

16. Mono Ammonium Phosphate (12:61:0) 100% water soluble

10.1110	2.01.0) 100 /0 Water Soluble	
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description 1.2 Particle size	 Free flowing granules 90% of the material shall pass through a 4 mm IS sieve and shall be retained on a 1 mm IS sieve. Not more than 5% shall be below than 1 mm size.

2.	CHEMICAL	12.0
	COMPOSITION	12.0
	2.1 Total nitrogen, all in	
	ammoniacal form	61.0
	percent by weight,	
	minimum	0.5
	2.2 Water soluble	
	phosphorus (as	0.5
	P_2O_5), percent by	0.0
	weight, minimum	0.5
	2.3 Sodium as NaCl	0.5
	percent by weight,	
	maximum	
	2.4 Matter insoluble in	
	water percent by	
	weight, maximum	
	2.5 Moisture, percent by	
	weight, maximum	
3	Others	Certificate from an
	- Culcis	
		independent surveyor or a
		recognized Government
		laboratory showing there is
		no contamination with
		radioactive material.

17. NPK (10-26-26)

S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION	
	1.1 Description and particle	• 90 percent of the material
	size	shall pass between 1 mm and
		4 mm IS sieve and not more
		than 5 percent will be below
		1mm size.

2	CHEMICAL	
	COMPOSITION	10
	2.1 Total nitrogen, percent	7.0
	by weight, minimum	
	2.2 Ammoniacal nitrogen,	3.0
	percent by weight,	///
	minimum	26.0
	2.3 Nitrogen in the form of	
	urea, percent by	22.5
	weight, maximum	
	2.4 Neutral ammonium	26.0
	citrate soluble	
	phosphate (as P_2O_5),	1.5
	percent by weight,	
	minimum	
	2.5 Water soluble	
	phosphate (as P_2O_5),	
	percent by weight,	
	minimum	
	2.6 water soluble potash (as	
	K_2O), percent by	
	weight, minimum	
	2.7 Moisture, percent by	,
	weight, maximum	
3	Others	Certificate from an
		independent surveyor or a
		recognized Government
		laboratory showing there is no
		contamination with active
		radioactive material.

18. NPK (12-32-16)

10. 111	IX (12-32-10)	
S.No.	CHARACTERISTICS	REQUIREMENTS
	PHYSICAL CONDITION 1.1 Description and particle size	90 percent of the material shall pass between 1 mm and 4 mm sieve and not more than 5 percent will be below 1 mm size.

2	CHEMICAL	
	COMPOSITION	12
	2.1 Total nitrogen, percent	9.0
	by weight, minimum	
	2.2Ammoniacal nitrogen,	3.0
	percent by weight,	//_
	minimum	32.0
	2.3 Nitrogen in the form of	
	urea, percent by	27.2
	weight, maximum	
	2.4 Neutral ammonium	16.0
	citrate soluble	
	phosphate (P_2O_5) ,	1.5
	percent by weight,	
	minimum	
	2.5 Water soluble phosphate	
	(P_2O_5) , percent by	
	weight, minimum	
	2.6 Watersoluble potash (as	
	K_2O), percent by	
	weight, minimum.	
	2.7 Moisture, percent by	
	weight, maximum	
3	Others	• Cartificate from independent
3	Others	Certificate from independent
		surveyor or a recognized
		government laboratory
		showing there is no
		contamination with active
		radioactive material.

19. NPK 20:20:10

17.11	111 20.20.10	
S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION	90 Percent of the material shall
	1.1 Description and particle size	pass between 1 mm and 4 mm sieve and not more than 5 percent will be below 1 mm size.

2	CHEMICAL	
	COMPOSITION	1.5
	2.1 Moisture, percent by	20.0
	weight, maximum	10.0
	2.2 Total nitrogen, percent	
	by weight, minimum	10.0
	2.3 Nitrogen in	
	ammoniacal form,	20.0
	percent by weight,	
	minimum	
	2.4 Nitrogen in nitrate	12.0
	form, percent by	
	weight, maximum	1.0
	2.5 Neutral ammonium	
	citrate soluble	
	Phosphates (as P_2O_5),	
	percent by weight,	
	minimum	
	2.6 Water Soluble	
	phosphates (as P ₂ O ₅)	
	percent by weight,	
	minimum	
	2.7Calcium nitrate, percent	
	by weight, maximum	
3	Others	Certificate from an
		independent surveyor or a
		recognized government
		laboratory showing there is no
		contamination with
		radioactive material.
		Tudiouvii ve ilimiviimii

21. Potassium Chloride (Muriate of Potash) (0-0-60)

21. PO	f Potash) (0-0-60)	
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description 1.2 Particle size	 Crystalline free flowing white or light grey or pinkish in color and free from visible contamination with clay and grit. 65% of the material shall pass through a 1.7 mm IS sieve and be retained on a 0.25 mm IS sieve.
2.	CHEMICAL COMPOSITION 2.1 Potash content (as K ₂ O), percent by weight, minimum 2.2 Moisture percent by weight, maximum 2.3 Sodium (as NaCl), percent by weight, maximum	0.5 3.5
3	Others	Certificate from an independent surveyor or a recognized Government laboratory showing there is no contamination with radioactive material.

22. Potassium Chloride (Muriate of Potash) (Granular) (0-0-60)

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description 1.2 Form	90 percent of the material shall pass between 1 mm and 4 mm IS sieve and not more than 5 percent will be below 1 mm size

2.	CHEMICAL COMPOSITION	60.0
	2.1 Water soluble Potash (as K ₂ O), percent by	3.5
	weight, minimum 2.2 Sodium (as NaCl), percent by weight,	1.0
	maximum	0.5
	2.3 Magnesium (as MgCl ₂) percent by weight, maximum	
	2.4 Moisture percent by weight, maximum	
3	Others	Certificate from an independent surveyor or a recognized Government
		laboratory showing there is no contamination with radioactive material.

23. Potassium Sulphate (0-0-50)

23. POI	23. Potassium Suipnate (0-0-50)		
S.No.	CHARACTERISTICS	REQUIREMENTS	
1	PHYSICAL CONDITION 1.1 Particle size	Not less than 65 percent of the material shall pass through 1.7 mm IS sieve and be retrained on 0.25 mm IS sieve.	
1	CHEMICAL		
	COMPOSITION	50.0	
	1.1 Potash content (K ₂ O),	17.5	
	percent by weight, minimum	2.5	
	1.2 Sulphur (as S), percent by weight, minimum	2.0	
	1.3 Total chloride (as Cl) percent by weight (on	1.5	
)	dry basis), maximum 1.4 Sodium as NaCl, percent by weight (on		

	dry basis), maximum 1.5 Moisture, percent by weight, maximum	-/(C
2	Others	Labeling and packaging as per the manufacture's specification

24. Single Super Phosphate (S.S.P) 16% P2O5 Powdered

24. 511	ngle Super Phosphate (S.S.P)	10% P2O5 Powdered
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description	The material should be free from excessive lumps and shall not form hard cake on storage.
2.	CHEMICAL COMPOSITION 2.1 Moisture percent by weight, maximum. 2.2 Free Phosphoric acid (as P ₂ O ₅) percent by weight, maximum 2.3 Water soluble phosphates (as P ₂ O ₅) percent by weight, minimum 2.4 Neutral Ammonium Citrate Soluble phosphates (as P ₂ O ₅) percent by weight, minimum 2.5 Sulphur (as S) percent	12.0 4.0 14.5 16.0

	by weight, minimum	
3.	Others	Certificate from an independent surveyor or a recognized Government
		laboratory showing there is no contamination with radioactive material

25. Single Super Phosphate (S.S.P) 16% P ₂ O ₅ Granulated		
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description 1.2 Particle Size	 The material should be free from excessive lumps and shall not form hard cake on storage. Not Less than 90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 percent shall pass through 1 mm IS sieve.
2.	CHEMICAL COMPOSITION 2.1 Moisture percent by weight, maximum. 2.2 Free Phosphoric acid (as P ₂ O ₅) percent by weight, maximum 2.3 Water soluble phosphates (as P ₂ O ₅) percent by weight, minimum 2.4 Neutral Ammonium	5.0 4.0 14.5 16.0

	Citrate Soluble phosphates (as P ₂ O ₅) percent by weight, minimum 2.5 Sulphur (as S) percent by weight, minimum	
3.	Others	Certificate from an independent surveyor or a recognized Government laboratory showing there is no contamination with radioactive material.

26. Solubor $(Na_2B_4O_{7.}5H_2O + Na_2B_{10}O_{16}.10H_2O)$ for soil spray

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	CHEMICAL COMPOSITION 1.1 Content of Boron (as B)	19.0
	percent by weight, minimum 1.2 Matter insoluble in water percent by weight, maximum	0.003
	1.3 Lead (as Pb) percent by weight, maximum	
3	Others	Labelling and packaging as per the manufacturer's specification.

27. Triple super phosphate (T.S.P.)

2/. I fi	pie super phosphate (1.S.P.)	
S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION	• The material should be free
	1.1 Description	from excessive lumps and shall
	1.2 Particle size	not form hard cake on storage.
		Not less than 90 percent of the
		material shall pass through 4
		mm IS sieve and shall be
		retained on 1 mm IS sieve. Not
		more than 5 percent shall be
		below 1 mm.

2	CHEMICAL	
	COMPOSITION	12
	2.1 Moisture, percent by	
	weight, maximum	3.0
	2.2 Free phosphoric acid (
	as P_2O_5), percent by	
	weight, maximum	46.0
	2.3 Total phosphates (as	10.0
	P_2O_5), percent by	
	weight, minimum	42.5
	2.4 Water soluble phosphates	42.3
	(as P ₂ O ₅), percent by	
	weight, minimum	
3	Country of Origin	Specify the country
4	Packing	 Polypropylene or
	174.1	polyethylene outer woven
		with 1 ply. Polypropylene
		inner bag of 50 kg net. Outer
		and inner bag should not be
		less than 200 gm. and 200
		gauges respectively.
		Bag should be stitched with
		strong synthetic thread.
5	Marking on bag	Each bag shall bear legibly and
3	5.1 Front side	indelibly the following
	3.1 Profit side	information
		a. Name of the fertilizer.
		b. Name of the manufacturer and his
	5 2 Posts dile	
	5.2 Back side	recognized trade mark if .and country of origin
		c. Percentage of phosphorous
		0 1 1
		d. Gross and net weight in kg.
		e. Year of manufacture.
		a. Name of the importer and his
		recognized trademark if any.
		b. Lot no.
		c. Apart from those two
		information importer is free to
		add any other information in
		the bags, if any, for its
		internal use.

6	Others	• Certificate from an
		independent surveyor or a
		recognized Government
		laboratory showing there is no
		contamination with radioactive
		material.

28. Urea (46-0-0)Prilled

28. Urea (46-0-0)Prilled		
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description and Form 1.2Particle size	 Free flowing, white granules, prilled 90 percent of the material shall pass through 2.8 mm IS sieve and not less than 80 percent by weight shall be retained on 1 mm IS sieve.
2.	CHEMICAL COMPOSITION 2.1 Moisture percent by weight, maximum. 2.2 Total Nitrogen, percent by weight, minimum 2.3 Biuret percent by weight, maximum	1.0 46.0 1.5
3	Others	Certificate from an independent surveyor or a recognized Government laboratory showing there is no contamination with radioactive material.

29. Urea (46-0-0) (Granular)

29. Ur	ea (46-0-0) (Granular)	
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description and Form 1.2 Particle size	 Free flowing, white granules, Granular Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 2 mm IS sieve. Not more than 5 percent shall be below 2 mm IS sieve.
2.	CHEMICAL COMPOSITION 2.1 Moisture percent by weight, maximum. 2.2 Total Nitrogen, percent by weight, minimum 2.3 Biuret percent by weight, maximum	1.0 46.0 1.5
3	Others	Certificate from an independent surveyor or a recognized Government laboratory showing there is no contamination with radioactive material

30. Urea Ammonium Phosphate (28-28-0)

	o. e rea / tili momain r nospilate (20 20 0)			
S.No.	CHARACTERISTICS	REQUIREMENTS		
1	PHYSICAL CONDITION			
	1.1 Description and	Practical size –Not less		
	particle size	than 90 Percent of the		
		material shall pass through		
		4 mm IS sieve and be		
		retained on 1 mm IS sieve.		
		Not more than 5 percent of		
		the particles shall be below		
		1 mm IS sieve.		

2	CHEMICAL COMPOSITION 2.1 Moisture, percent by weight, maximum 2.2 Total nitrogen, percent by weight, minimum 2.3 Ammoniacal nitrogen, percent by weight, minimum 2.4 Neutral ammonium citrate soluble phosphate (as P ₂ O ₅), percent by weight, minimum 2.5 Water soluble	1.5 28.0 9.0 28.0 25.2
	phosphate (as P ₂ O ₅), percent by weight, minimum	
3	Others	Certificate from independent surveyor or a recognized Government laboratory showing there is no contamination with active radioactive material.

31. Zinc SulphateHeptahydrate (ZnSO4.7H20)

1	31. Zine Surphaterreptanyurate (ZiiSO4.71120)		
	S.No.	CHARACTERISTICS	REQUIREMENTS
	1	PHYSICAL CONDITION 1.1 Description 1.2 Form	Free flowingCrystalline form

2	CHEMICAL	
	COMPOSITION	21.0
	2.1 Zinc (as Zn), percent	
	by weight, minimum	0.003
	2.2 Lead (as Pb), percent	
	by weight,	0.1
	maximum	= / (-
	2.3 Copper (as Cu),	0.5
	percent by weight,	
	maximum	1.0
	2.4Magnesium (as Mg),	10.0
	percent by weight,	10.0
	maximum	0.0025
	2.5 Matter insoluble in	0.0025
	water, percent by weight, maximum	0.01
	2.6 Sulphur (as S), percent	0.01
	by weight, minimum	4.0
	2.7 Cadmium (as Cd),	4.0
	percent by weight,	
	maximum	
	2.8 Arsenic (as As),	
	percent by weight,	
	maximum	
	2.9 pH not less than	
3	Others	Labeling and packaging as
		per the manufacture's
		specification.
		•

32. Zinc Sulphate Mono – hydrate (ZnSO₄.H₂O)

S.	CHARACTERISTICS	REQUIREMENTS	REQUIREMENTS
No.			
1	PHYSICAL CONDITION 1.1 Description	Free flowing powder form.	Free flowing powder form.
2	CHEMICAL COMPOSITION 2.1 Zinc (as Zn), percent by weight,	33.0 0.003	33.0 0.003

खण्ड ६९) संख्या २७ नेपाल राजपत्र भाग ५ मिति २०७६।६।१३

minimum	0.1	0.1
2.2 Lead (as Pb)	A 7 47 47	
percent by	0.5	0.5
weight,		
maximum		
2.3 Copper (as Cu),	0.5	1.0
percent by		
weight,	1.0	1.0
maximum		
2.4Magnesium (as		
Mg), percent by		15.0
weight,		
maximum	-	0.0025
2.5 Iron(as Fe),		
percent by	-	0.01
weight,		
maximum	4.0	4.0
2.6 Matter insoluble in		
water, percent by		
weight,		
maximum		
2.7 Sulphur (as S),		
percent by		1
weight,		
minimum		
2.8 Cadmium (as Cd),		
percent by		
weight,		
maximum		
2.9 Arsenic (as As),		
percent by		
weight,		
maximum		
2.10 pH not less than		
3 Others	 Labeling and 	 Labeling and
	packaging as	packaging as
	per the	per the
	manufacture's	manufacture'
	specification.	S
		specification.

33. Boronated Single Super Phosphate (S.S.P) 16% P2O5 Granulated

33. Boronated Single Super Phosphate (S.S.P) 16% P ₂ O ₅ Granulate		
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description 1.2 Particle Size	 The material should be free from excessive lumps and shall not form hard cake on storage. Not Less than 90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall pass through 1 mm
2.	CHEMICAL COMPOSITION 2.1 Moisture percent by weight, maximum. 2.2 Free Phosphoric acid (as P ₂ O ₅) percent by weight,	12.0 4.0 14.5 16.0
	maximum 2.3 Water soluble phosphates (as P ₂ O ₅) percent by weight, minimum 2.4 Neutral Ammonium Citrate Soluble phosphates (as P ₂ O ₅) percent by weight, minimum 2.5 Sulphur (as S) per cent by weight,	11.0 0.15-0.20
3.	minimum 2.6 Boron (as B) percent by weight Others	Certificate from an independent surveyor or a recognized Government laboratory showing there is no contamination with radioactive material.

34. Calcium Nitrate (100% water soluble)

54. Cu.	54. Calcium Mitate (10070 water soluble)			
S.No.	CHARACTERISTICS	REQUIREMENTS		
1	CHEMICAL COMPOSITION			
	1.1 Total nitrogen (Ammoniacal and	15.5		
	nitrate form), percent by weight,			
	minimum	14.5		
	1.2 Nitrate Nitrogen as N, percent by	1 / (1		
	weight, minimum	18.5		
	1.3 Water Soluble Calcium (as Ca),			
	percent by weight, minimum	1.5		
	1.4 Matter insoluble in water, percent			
	by weight, maximum			
2	Others	Certificate from		
		independent		
		surveyor or a		
		recognized		
		government		
		laboratory showing		
		there is no		
		contamination with		
		active radioactive		
		material.		

35. DAP Fortified with Boron (18:46:0:0.3)

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Particle Size	Not less than 90 percent of the material shall be retained between 1 mm and 4 mm IS sieve and not more than 5 percent shall be below 1 mm IS sieve.
2.	CHEMICAL COMPOSITION 2.1 Moisture percent by weight maximum 2.2 Total Nitrogen percent by weight, minimum 2.3 Ammonical nitrogen percent by weight, minimum	1.5 18.0 15.5 2.5

	2.4 Urea nitrogen(as N) percent by weight, maximum	46.0
	2.5 Neutral ammonium citrate	
	soluble phosphate(as P ₂ O ₅),	41.0
	percent by weight, minimum	
	2.6 Water Soluble phosphate(as	0.3
	P ₂ O ₅) per cent by weight,	4 / (-
	minimum	
	2.7 Boron(as B) percent by weight,	
	minimum	
3.	Others	Labelling and
		packaging as per the
		manufacturer's
		specification.

36. DAP fortified with Zinc(18:46:0:0.5)

50. D111	56. DAP fortified with Zinc(18:46:0:0.5)			
S.No.	CHARACTERISTICS	REQUIREMENTS		
1.	PHYSICAL CONDITION 1.1 Particle Size	Not less than 90 percent of the material shall pass through 4 mm IS sieve and retained on 1 mm IS sieve. Not more than 5 percent shall be below 1 mm IS sieve.		
2.	CHEMICAL COMPOSITION 2.1 Moisture percent by weight maximum 2.2 Total Nitrogen percent by weight, minimum 2.3 Ammonical nitrogen percent by weight, minimum 2.4 Urea Nitrogen percent by weight, maximum 2.5 Neutral ammonium citrate soluble phosphate(as P ₂ O ₅), percent by weight, minimum 2.6 Water Soluble phosphates(as P ₂ O ₅) per cent by weight, minimum	2.5 18.0 15.5 2.5 46.0 41.0		

	2.7 Zinc(as Zn) percent by weight, minimum	
3.	Others	Labelling and packaging as per the manufacturer's specification.

37. Magnesium sulphate					
S.No.	CHARACTERISTICS	REQUIREMENTS			
1	PHYSICAL CONDITION				
	1.1 Description	Free flowing,			
		crystalline form.			
2	CHEMICAL COMPOSITION				
	2.1 Magnesium (as Mg), percent	9.6			
	by weight, minimum				
	2.2 Sulphur (as S), percent by	12.0			
	weight, minimum	1.0			
	2.3 Matter insoluble in water,				
	percent by weight, maximum	0.003			
	2.4 Lead (as Pb), percent by	5.0-8.0			
	weight, maximum				
	2.5 pH (5% solution)				
3	Others	Certificate from			
		independent surveyor			
		or a recognized			
		government			
		laboratory showing			
		there is no			
		contamination with			
		active			
		radioactivematerial.			

38. Mono-Potassium Phosphate (0:52:34) (100% Water soluble)

S.No.	CHARACTERISTICS	REQUIREMENTS
1	CHEMICAL COMPOSITION	
	1.1 Moisture, percent by weight,	0.5
	maximum	52.0
	1.2 Water soluble phosphates (as	

P ₂ O ₅), percent by weight,	34.0
1.3 Water soluble potash (as K ₂ O), percent by weight, minimum	0.025
1.4 Sodium (as NaCl), percent by weight (on dry basis), maximum	. 170
Others	Certificate from independent surveyor or a recognized government laboratory showing there is no contamination with active radioactivematerial.
	minimum 1.3 Water soluble potash (as K ₂ O), percent by weight, minimum 1.4 Sodium (as NaCl), percent by weight (on dry basis), maximum

39. Neem Coated Urea (46:0:0)

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION	
	1.1 Particle size	Not less than 90 per
		cent of the material
		shall pass through 2.8
		mm IS sieve and not
		less than 80 per cent
		by weight shall be
		retained on 1 mm IS
		sieve.
2.	CHEMICAL COMPOSITION	
	2.1 Moisture percent by weight,	1.0
	maximum.	46.0
	2.2 Total Nitrogen, percent by	
	weight, minimum	1.5
	2.3 Biuret per cent by weight,	0.035
	maximum	
	2.4 Neem oil content soluble in	
	Benzene, percent by weight,	
	minimum.	
3	Others	Certificate from an
		independent surveyor
		or a recognized

	Government
	laboratory showing
	there is no
	contamination with
	radioactive material

40. Nitrophoshate with Potash Fortified with Boron (15:15:15:0.2B)

S.No.	ohoshate with Potash Fortified with CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Particle Size	Not less than 90 percent of the material shall pass through 4 mm IS sieve and retained on 1 mm IS sieve.
2.	CHEMICAL COMPOSITION 2.1 Moisture percent by weight, maximum 2.2 Total Nitrogen percent by weight, minimum 2.3 Ammonical nitrogen percent by weight, minimum 2.4 Nitrate nitrogen percent by weight, maximum 2.5 Neutral ammonium citrate soluble phosphate(as P ₂ O ₅), percent by weight, minimum 2.6 Water Soluble phosphates(as P ₂ O ₅) per cent by weight, minimum 2.7 Water Soluble potash(as K ₂ O) per cent by weight, minimum 2.8 Boron(as B) percent by weight, minimum 2.9 Calcium Nitrate percent by	1.5 15.0 7.5 7.5 15.0 4.0
3.	weight, maximum Others	Labelling and packaging as per the manufacturer's specification.

41. NPK 15:15:15

11. NFK 15.15.15				
S.No.	CHARACTERISTICS	REQUIREMENTS		
1	PHYSICAL CONDITION	Not less than 90 percent of		
	1.1 Description and	the material shall pass		
	particle size	through 4 mm IS sieve and		
	P-7-4	be retained on 1 mm IS		
		sieve.		
2	CHEMICAL			
	COMPOSITION	15.0		
	2.1 Total nitrogen, percent by			
	weight, minimum	12.0		
	2.2 Ammoniacal nitrogen,			
	percent by weight,	3.0		
	minimum			
	2.3 Nitrogen in the form of	15.0		
	urea, percent by weight,			
	maximum	12.0		
	2.4 Neutral ammonium citrate			
	soluble phosphate (as	15.0		
	P ₂ O ₅), minimum			
	2.5 Water soluble phosphate	1.5		
	(as P_2O_5), percent by			
	weight, minimum.	,		
	2.6 Watersoluble potash (as			
	K_2O), percent by			
	weight, minimum.			
	2.7 Moisture, percent by			
	weight, maximum			
3	Others	Certificate from		
		independent surveyor or a		
		recognized government		
		laboratory showing there is		
		no contamination with		
		active radioactive material.		

42. NPK 19:19:19 (100% Water soluble)

		13 the last the last solution of	
Į	S.No.	CHARACTERISTICS	REQUIREMENTS
	1	CHEMICAL COMPOSITION	
		1.1 Total nitrogen percent by	19.0
		weight, minimum	
		1.2 Nitrate nitrogen, percent by	4.0

weight, maximum	
1.3 Ammoniacal nitrogen, percent	4.5
by weight, minimum	
1.4 Urea nitrogen, percent by	10.5
weight, maximum	
1.5 Water soluble phosphate (as	19.0
P ₂ O ₅), percent by weight,	
minimum.	19.0
1.6 Water soluble potash (as K ₂ O),	
percent by weight, minimum.	0.5
1.7 Sodium (as NaCl), percent by	
weight (on dry basis),	0.5
maximum	
1.8 Matter insoluble in water,	0.5
percent by weight, maximum	
1.9 Moisture, percent by weight,	
maximum	

43. Potassium Nitrate (13:0:45) (100% Water soluble)

3. Potas	assium Nitrate (13:0:45) (100% Water soluble)			
S.No.	CHARACTERISTICS	REQUIREMENTS		
1	CHEMICAL COMPOSITION			
	1.1 Moisture, percent by weight,	0.5		
	maximum	13.0		
	1.2 Total nitrogen (all in nitrate	1.37%		
	form), percent by weight, minimum	45.0		
	1.3 Water soluble potash (as K ₂ O), percent by weight, minimum	1.0		
	1.4 Sodium (as Na), percent by weight (on dry basis),	1.5		
	maximum	0.05		
	1.5 Total chloride (as Cl), percent			
	by weight (on dry basis),			
	maximum			
	1.6 Matter insoluble in water,			
	percent by weight, maximum	5 1000		
2	Others	Certificate from		
		independent surveyor		
		or a recognized		
		government		
		laboratory showing		

	there	is	no
	contami	nation	with
	active		
	radioact	ivemater	rial.

44. Rock Phosphate (Powdered)

44. Rock I hospitate (I owdered)				
S.No.	CHARACTERISTICS	REQUIREMENTS		
1	PHYSICAL CONDITION			
	1.1 Description and particle size	Minimum 90 percent		
		of the material shall		
		pass through 0.5 mm		
		IS sieve and the		
		balance 10 percent of		
		material shall pass		
		through 0.25 IS sieve.		
2	CHEMICAL COMPOSITION			
	2.1 Total phosphorus (as P_2O_5)	18.0		
	percent by weight minimum			
3	Others	Certificate from		
		independent surveyor		
		or a recognized		
		government		
		laboratory showing		
		there is no		
		contamination with		
		active		
		radioactivematerial.		

45. Rock Phosphate (Mixed)

-	or Hock I hospitate (Mixea)			
	S.No.	CHARACTERISTICS	REQUIREMENTS	
	1	PHYSICAL CONDITION		
	167	1.2 Description and particle size	100 percent should	
			pass through 100	
			mesh IS Sieve.	
Ī	2	CHEMICAL COMPOSITION	Market and the	
		2.1 Total phosphorus (as P2O5)	10.0	
1		percent by weight minimum	2000	
		2.2 Moisture percent by weight,	25.0	
		maximum		
	3	Others	Certificate from	
			independent surveyor	

	or a recognized
	government
	laboratory showing
	there is no
	contamination with
	active
	radioactivematerial.

46. SSP fortified with Zinc

S.No.	CHARACTERISTICS	REQUIREMEN TS
1.	CHEMICAL COMPOSITION	15
	1.1 Moisture percent by weight,	12.0
	maximum.	4.0
	1.2 Free Phosphoric acid (as P ₂ O ₅)	
	percent by weight, maximum	14.5
	1.3 Water soluble phosphates (as	
	P ₂ O ₅) percent by weight,	160
	minimum	16.0
	1.4 Neutral Ammonium Citrate	11.0
	Soluble phosphates (as P ₂ O ₅) percent by weight, minimum	11.0 0.5
	1.5 Sulphur (as S) percent by weight,	0.5
	minimum	
	1.6 Zinc (as Zn) percent by weight,	
	minimum	
2.	Others	Certificate from
		an independent
		surveyor or a
		recognized
		Government
		laboratory
		showing there is
		no contamination
		with radioactive material.
		material.

47. Sulphur (90% Granular)(0-0-0-90)

S.No.	CHARACTERISTICS	REQUIREMENTS
1	PHYSICAL CONDITION	Not less than 90
	1.1 Description and particle size	percent of the material

		shall pass through 4.0 mm IS sieve and be retained on 1 mm IS sieve and not more than 5% shall be below 1 mm IS sieve.
2	CHEMICAL COMPOSITION 2.1 Total sulphur (as S), percent by weight, minimum 2.2 Moisture, percent by weight, maximum	90
3	Others	Certificate from independent surveyor or a recognized government laboratory showing there is no contamination with active radioactive material.

Note: The product may contain inert filler materials as bentonite etc. up to the extent of 10% by weight maximum.

48. Urea Briquettes (46:0:0)

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION	
	1.1 Particle size	Minimum 90 percent
		of the material shall
		be retained between
		5.7 mm and 3.8 mm
		IS sieve.
2.	CHEMICAL COMPOSITION	
	2.1 Moisture percent by weight,	1.0
	maximum.	46.0
	2.2 Total Nitrogen, percent by	77.97
	weight, minimum	1.5
	2.3 Biuret percent by weight,	0.035
	maximum	0.7000.000
	2.4 Neem oil content soluble in	
	Benzene, percent by weight,	
	minimum.	
3	Others	Certificate from an

independent surveyor
or a recognized
Government
laboratory showing
there is no
contamination with
radioactive material

49. ZincatedUrea(43-0-0-2)

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION	
	1.1 Particle Size	Not more than 90
		percent of the material
		shall pass through
		2.8mm IS sieve and not
		less than 80 percent by
		weight shall be retained
		on 1 mm IS sieve
2.	CHEMICAL COMPOSITION	
	2.1 Moisture percent by weight,	1.0
	maximum	43.0
	2.2 Total Nitrogen percent by	
	weight (on dry basis),	2.0
	minimum	1.5
	2.3 Zinc (as Zn) percent by	
	weight, minimum	
	2.4 Biuret, percent by weight,	
	maximum	
3.	Others	Labelling and packaging
		as per the manufacturer's
		specification.

50. Gahun (Wheat) mal -Basal NPK fortified with Boron (10:20:10:0.2)

S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION 1.1 Description and particle size	90 percent of the material shall pass between 1 mm and 4 mm IS sieve and not more than 5 percent will be below

		1 mm size.
2.	CHEMICAL COMPOSITION	Percentage
	2.1Total nitrogen percent by weight, minimum	10
	2.2 Total phosphate (P ₂ O ₅) percent by weight, minimum	20
	2.3 Total potash (as K ₂ O) percent by weight, minimum	10
	2.4 Total B percent by weight, minimum	0.2
	2.5 Moisture percent by weight, maximum	1.5
3.	Others	Certificate from independent
		surveyor or recognized
		Government Laboratory showing there is no
	/ -	contamination with active
		radioactive material.

51. Dhan (Rice) mal -Basal (NPK Fortified with Zn) 20:20:20:1.0

1. Dian (Rice) mai -basai (NI K Foi tineu with Zii) 20.20.20.1.0		
S.No.	CHARACTERISTICS	REQUIREMENTS
1.	PHYSICAL CONDITION	
	1.1 Description and particle	90 percent of the material
	size	shall pass between 1 mm
		and 4 mm IS sieve and not
		more than 5 percent will be
		below 1 mm size.
2.	CHEMICAL	Percentage
	COMPOSITION	
	2.1Total nitrogen percent by weight, minimum	20

	2.2 Total phosphate (P ₂ O ₅) percent by weight, minimum	20
	2.3 Total potash (as K ₂ O) percent by weight, minimum	20
	2.4 Total Zn percent by weight, minimum	1.0
	2.5Moisture percent by weight, maximum	1,5
3.	Others	Certificate from independent surveyor or recognized Government Laboratory showing there is no contamination with active
		radioactive material.

52. Makai (Maize) mal -Basal (NPK fortified with B) 10:20:20:0.3

	52. Makai (Maize) mai -Basai (NPK fortified with B) 10:20:20:0.3			
S.No.	CHARACTERISTICS	REQUIREMENTS		
1.	PHYSICAL CONDITION			
	1.1 Description and particle	90 percent of the material		
	size	shall pass between 1 mm		
		and 4 mm IS sieve and not		
		more than 5 percent will be		
		below 1 mm size.		
2.	CHEMICAL	Percentage		
	COMPOSITION			
	2.1Total nitrogen percent by	10		
	weight, minimum			
	2.2Total phosphate (P ₂ O ₅)	20		
	percent by weight,			
	minimum			
	2.3 Total potash (as K ₂ O)	20		
	percent by weight,			
	minimum			
	2.4Total B percent by weight,	0.3		
	minimum			
	2.5 Moisture percent by	1.5		
	weight, maximum			
3.	Others	Certificate from		

	independent surveyor or
	recognized Government
	Laboratory showing there is
	no contamination with
	active radioactive material.

अाज्ञाले, डा. युवक ध्वज जि.सी. नेपाल सरकारको सचिव