



FEBRUARY 16, 2021

# MATERIAL SPECIFICATIONS & TEST METHODS OF CATTLE FEED RAW MATERIAL

**DOCUMENT NO.: GTC/CFP/0022/1/160221**

**PURCHASE DEPARTMENT (CATTLE FEED)**

**MEHSANA DISTRICT CO-OPERATIVE MILK PRODUCERS' UNION LIMITED**

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MEHSANA DISTRICT CO-OPERATIVE MILK PRODUCERS' UNION LIMITED  
Material Specifications and Test Methods of Cattle Feed Raw Material and Other Items  
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## 4.0 Technical Specifications of Cattle Feed Raw Materials

### 4.1 Material Acceptance Criteria

When the materials (consignment) will reach our cattle feed plant, the physical conditions and in case of packaging materials, cleanliness will be thoroughly checked by the Store Personnel along with Personnel of the respective department; it is chiefly Quality Assurance.

Later, the physical quality parameters will be primarily checked by the quality assurance personnel (Sampler & if, required; Head of the Department) before accepting the material & then, only; it will be allowed for unloading at our inventory.

If; the parameters will not meet the requirements (Physically), the materials will be strictly rejected &/or may be accepted as a whole or partially in a special circumstance considering the significance and variability of quality parameters & with only, kind approval of I/C Managing Director.

Also, the material already unloaded at our inventory, if; found inferior in quality when tested chemically, the material (consignment) will be rejected & the supplier will have to lift-up the rejected material (consignment) at earliest i.e. within 15 days period of time.



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## 4.2 Material Specifications & Premium/Rebate Calculation Sheet

### 4.2.1 Material Name: Rapeseed Extraction (38%)

SAP Code: CFEED000094

#### Specification: Rapeseed Extraction (38%)

Test	Specification	Max./Min. Rebate Limits	Unit
Moisture	Max. 10.00	Up to 12.00	%
Protein	Min. 38.00	Down to 34.00	%
Fiber	Max. 12.00	Up to 15.00	%
Silica	Max. 2.50	Up to 5.00	%

#### Premium/Rebate Calculation: Rapeseed Extraction (38%)

Quality Parameter	Guarantee (%)	Up to/ down to	Rebate 1	Up to/ down to	Rebate 2
Moisture	10.00 (Max)	12.00	1.00		
Protein	38.00 (Min)	36.00	2.50	34.00	3.00
Fiber	12.00 (Max)	15.00	1.00		
Silica	2.50 (Max)	3.00	1.00	5.00	2.00

#### Sampling Process: Rapeseed Extraction (38%)

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	40-50% Bags	1000 g



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4.2.2 Material Name: Maize

SAP Code: CFEEED000032

Specification: Maize

Test	Specification	Max./Min. Rebate Limits	Unit
Dust	Max. 1.00	Up to 3.00	%
Infestation	Max. 5.00	Up to 30.00	%
Moisture	Max. 10.00	Up to 16.00	%

Premium/Rebate Calculation: Maize

Quality Parameter	Guarantee (%)	Up to/ down to	Rebate 1	Up to/ down to	Rebate 2	Up to/ down to	Rebate 3
Moisture	10.00 (Max)	12.00	1.00	14.00	2.00	16.00	3.00
Infestation	5.00 (Max)	10.00	1.00	20.00	2.00	30.00	3.00
Dust	1.00 (Max)	2.00	1.00	3.00	2.00		

Sampling Process: Maize

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	60 % Bags	1000 g



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**4.2.3 Material Name: Rice Polish Fine Grade-I / RP Fine Grade -1**

SAP Code: CFEED000037

**Specification: Rice Polish Fine Grade-I / RP Fine Grade -1**

Test	Specification	Max./Min. Rebate Limits	Unit
Moisture	Max. 10.00	Up to 12.00	%
Fat	Min. 16.00	Down to 12.00	%
	Up to 20.00	Premium will be @ 3.12 %	
Silica	Max. 5.00	Up to 10.00	%
	03.00 to 05.00	Premium will be @ 1.00 %	

**Premium/Rebate Calculation: Rice Polish Fine Grade-I / RP Fine Grade -1**

Quality Parameter	Guarantee (%)	up to/ down to	Rebate 1	up to/ down to	Rebate 2	up to/ down to	Rebate 3	up to/ down to	Premium
Moisture	10.00 (Max)	12.00	1.00						
Silica	05.00 (Max)	6.00	1.00	8.00	2.00	10.00	3.00	3.00	1.00
Fat	16.00 (Min)	12.00	6.25					20.00	3.12

**Sampling Process: Rice Polish Fine Grade-I / RP Fine Grade -1**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	100% Bags	1000 g



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**4.2.4 Material Name: De-Oiled Rice Bran (DORB)**

SAP Code: CFEE000013

**Specification: De-Oiled Rice Bran (DORB)**

Test	Specification	Max./Min. Rebate Limits	Unit
Protein	Min. 15.00	Down to 11.00	%
Moisture	Max. 10.00	Up to 14.00	%
Silica	Max. 5.00	Up to 8.00	%
		03.00 to 05.00 Premium will be @ 1.00 %	
Fiber	Max. 11.00	Up to 15.00	%

**Premium/Rebate Calculation: De-Oiled Rice Bran (DORB)**

Premium will be @ 1 %; if the Silica will be in between 03.00 to 05.00 %. From 05.00 % to 08.00 %, rebate will be calculated.

Quality Parameter	Guarantee (%)	up to/down to	Rebate 1	up to/down to	Rebate 2	up to/down to	Rebate 3	up to/down to	Premium
Moisture	10.00 (Max)	12.00	1.00	14.00	2.00				
Protein	15.00 (Min)	13.00	2.00	11.00	4.00				
Fiber	11.00 (Max)	13.00	1.00	15.00	2.00				
Silica	05.00 (Max)	6.00	2.00	8.00	3.00			3.00	1.00

**Sampling Process: De-Oiled Rice Bran (DORB)**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	40-50% Bags	1000 g



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4.2.5 Material Name: Cofeed- Corn Gluten Feed (CGF)

SAP Code: CFEED000171

**Specification:** Cofeed- Corn Gluten Feed (CGF)

Test	Specification	Max./Min. Rebate Limits	Unit
Moisture	Max. 10.00	Up to 12.00	%
Protein	Min. 19.00	Down to 16.00	%
Fiber	Max. 12.00	Up to 15.00	%
Silica	Max. 1.00	Up to 02.50	%

**Premium/Rebate Calculation:** Cofeed- Corn Gluten Feed (CGF)

Quality Parameter	Guarantee (%)	Up to/ down to	Rebate 1	Up to/ down to	Rebate 2	Up to/ down to	Rebate 3
Moisture	Max. 10.00	12.00	1.00				
Protein	Min. 19.00	18.00	1.00	16.00	2.00		
Fiber	Max. 12.00	13.00	1.00	15.00	2.00		
Silica	Max. 1.00	2.50	2.00				

**Sampling Process:** Cofeed- Corn Gluten Feed (CGF)

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	50% Bags	1000 g





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**4.2.6 Material Name: Guar Meal (55%) Guar Korma (55%)**

SAP Code: CFEED000026

**Specification: Guar Meal (55%) Guar Korma (55%)**

Test	Specification	Max./Min. Rebate Limits	Unit
O+A	Min. 55.00	Down to 49.00	%
Moisture	Max. 10.00	Up to 12.00	%
Fiber	Max. 6.00	Upto10.00	%
Silica	Max. 1.00	Up to 2.50	%

**Premium/Rebate Calculation: Guar Meal (55%) Guar Korma (55%)**

Quality Parameter	Guarantee (%)	Up to/ down to	Rebate 1	Up to/ down to	Rebate 2	Up to/ down to	Rebate 3
Moisture	10.00 (Max)	12.00	1.00				
O + A	55.00 (Min)	53.00	1.00	51.00	2.00	49.00	3.00
Fiber	6.00 (Max)	8.00	1.00	10.00	2.00		
Silica	1.00 (Max)	2.50	1.00				

**Sampling Process: Guar Meal (55%) Guar Korma (55%)**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	50% Bags	1000 g



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**4.2.7 Material Name: Distiller's Dried Grains with Soluble (DDGS-Maize/ Maize Jowar Mix)**

SAP Code: CFED000233

**Specification: Distiller's Dried Grains with Soluble (DDGS-Maize/ Maize Jowar Mix)**

Test	Specification	Max./Min. Rebate Limits	Unit
O+A	Min. 37.00	Down to 33.00	%
Moisture	Max. 10.00	Up to 12.00	%
Fiber	Max. 12.00	Up to 15.00	%
Silica	Max. 2.00	Up to 3.00	%
Albumin	Min 30.00	Down to 27.00	%
Oil	Min 07.00	Down to 06.00	%

**Premium/Rebate Calculation: Distiller's Dried Grains with Soluble (DDGS-Maize/ Maize Jowar Mix)**

Quality Parameter	Guarantee (%)	Up to/ down to	Rebate 1	Up to/ down to	Rebate 2	Up to/ down to	Rebate 3
O+A	Min. 37.00	Down to 35.00	1.00	34.00	2.00	33.00	4.00
Moisture	Max. 10.00	Up to 12.00	1.00				
Fiber	Max. 12.00	Up to 13.00	1.00	15.00	2.00		
Silica	Max. 2.00	Up to 3.00	2.00				
Albumin	Min 30.00	Down to 12.00					
Oil	Min 07.00	Down to 06.00					

**Sampling Process: Distiller's Dried Grains with Soluble (DDGS-Maize/ Maize Jowar Mix)**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	40-50% Bags	1000 g



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**4.2.8 Material Name: By Pass Fat Feed Supplement (84%)**

SAP Code: CFEEED000085

**Specification: By Pass Fat Feed Supplement (84%)**

Test	Specification	Max./Min. Rebate Limits	Unit
Moisture	Max. 05.00	Up to 06.00	%
Fat	Min. 84.00	Down to 80.00	%
Calcium	Min. 08.00	Down to 06.00	%

**Premium/Rebate Calculation: By Pass Fat Feed Supplement (84%)**

Quality Parameter	Guarantee (%)	up to/down to	Rebate 1	up to/down to	Rebate 2	up to/down to	Rebate 3	up to/down to	Premium
Moisture	05.00 (Max)	6.0	1.00						
Fat	84.00 (Min)	82.0	1.00	80.00	2.00				
Calcium	08.00 (Max)	6.0	1.00						

**Sampling Process: By Pass Fat Feed Supplement (84%)**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	40-50% Bags	1000 g



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4.2.9 Material Name: Cotton Seed Extraction (40%)

SAP Code: CFEED000012

**Specification:** Cotton Seed Extraction (40%)

Test	Specification	Max./Min. Rebate Limits	Unit
Moisture	Max. 10.00	Up to 12.00	%
Protein	Min. 40.00	Down to 36.00	%
Fiber	Max. 14.00	Up to 16.00	%
Silica	Max. 2.50	Up to 5.00	%

**Premium/Rebate Calculation:** Cotton Seed Extraction (40%)

Quality Parameter	Guarantee (%)	Up to/down to	Rebate 1	Up to/down to	Rebate 2
Moisture	10.00 (Max)	12.00	1.00		
Protein	40.00 (Min)	38.00	1.00	36.00	2.00
Fiber	14.00 (Max)	16.00	1.00		
Silica	2.50 (Max)	3.00	1.00	5.00	2.00

**Sampling Process:** Cotton Seed Extraction (40%)

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	40-50% Bags	1000 g



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**4.2.10 Material Name: By Pass Fat Feed Supplement (99%)**

SAP Code: CFEED000284

**Specification: By Pass Fat Feed Supplement (99%)**

Test	Specification	Max./Min. Rebate Limits	Unit
Visual observation			
Fat	Min. 99.00	Down to 95.00	%

**Premium/Rebate Calculation: By Pass Fat Feed Supplement (99%)**

Quality Parameter	Guarantee (%)	up to/down to	Rebate 1	up to/down to	Rebate 2	up to/down to	Rebate 3	up to/down to	Premium
Fat	99.00 (Min)	97.0	2.00	95.00	4.00				

**Sampling Process: By Pass Fat Feed Supplement (99%)**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	40-50% Bags	1000 g



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**4.2.11 Material Name: A-Twill Gunny Bag (70KG)**

SAP Code: GNBGCF000001

**Specification: A-Twill Gunny Bag (70KG)**

The sacking and bags made out of it shall conform to the requirements laid down in table below:

Tests/ Parameters	Requirement	UOM
Outside Length	1120 (+30, -0)	mm
Outside Width	675 (+30, -0)	mm
Weight per bag	1190 (+120, -90)	gm
Ends	102 ± 6 (down to 93)	No/dm
Picks	35 ± 2 (down to 30)	No/dm
Moisture	Max. 20	%
Breaking load of sacking [Strip method (10 x 20 cm)]	-	
Warpway	204 kg (or 450 lb)	
Weftway	180 kg (or 397 lb)	
Breaking load of seam	67 kg (or 148 lb)	

Weight of bags for other dimensions as agreed to between the buyer and the seller shall be proportional to the weight of 1190 gm per 112 x 67.5 cm bags with tolerance of + 10 or - 7.5 per cent on bag weight.

Note:

1. Bags received with poor quality (Rejected during utilization process) from whole consignment will be returned back to concern supplier.
2. No loose material will be accepted.
3. Bags must be appropriate to hold 70KG Cattle Feed in Palate form.
4. Quoted Rate should be for per 100 bags.

**Premium/Rebate Calculation: A-Twill Gunny Bag (70KG)**

As per Dudhsagar Dairy Condition.

Quality Parameter	Guarantee (%)	Up to/down to	Rebate 1	Up to/down to	Rebate 2	Up to/down to	Rebate 3
ENDS	96.00 MIN	95.00	0.20	94.00	0.70	93.00	1.50
PICKS	33.00 MIN	32.00	0.50	31.00	1.00	30.00	1.50
Average	1130.00	1100.00	1.00				



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corrected weight	MIN						
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**Sampling Process:**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	Selection of Bales: Up to 20 Bales:2Bales 21 - 100 bales:3 Bales 1 Bale = 400 bags	30 Bags

**4.2.11.1 SPECIFICATION OF NEW & EMPTY 'A' TWILL GUNNY BAGS**

**Scope:** This specification prescribes the constructional details and other particulars of A-Twill jute bags of dimensions 112 x 67.5 cm (or 44 x 26.5 inch)

**General Requirements:**

**Sacking:** The bags shall be made from single pieces of double warp 2/1 twill weave jute sacking of uniform construction and of 67.5 cm width and the warp running along the length of the bags. There shall be three blue stripes, or stripes as agreed to between the buyer and the seller, woven along the length of the bag. The weight per square metre of sacking used in the fabrication of the bags shall be 760 gm.

**Seam:** The sides of the bags shall be sewn with overhead stitches on selvedge through two layers of sacking, using two strands of 3 ply jute twine of 380 tex x 3 (or 11 grist x 3). The stitching shall be of even tension through which all the loose ends securely fastened. The number of stitches per 10 cm at the sides shall be between 9 and 11.

**Safety stitch:** A line of safety union stitch shall be provided at the inner edges of the overhead stitches using 2 ply jute twine of 275 to 345 tex x 2 (or 8 to 10 grist x 2). The number of safety union stitches per 10 cm shall be between 9 and 11.

**Hemming at the Mouth:** At the mouth of the bags, the raw edges of sacking shall be turned over first to a depth of about 1 cm and then to a depth of about 2 cm and the three layers of sacking, thus formed, shall be hemmed, with jute yarn of 275 to 345 tex (or 8 to 10 grist). The number of stitches per 10 cm in the hem shall be between 9 to 11.

**Freedom from Defects:** The cloth used for the bags should be generally free from weaving defects, such as holes, cuts, tears, floats, crushed selvedges, spots and stains. The bags should be generally free from sewing defects such as gap stitches, loose ends and frayed ends.

**Joined bags:** The seam used to join the two pieces in a joined bag shall have strength not less than the breaking strength of seam as specified in the relevant Indian Standard and the same shall be sufficiently tight to prevent sifting or leakages of the content of the bag. The joining shall be done in such a manner that warp and weft shall run in the same direction. The number



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of joined bags in each bundle of bags/each bale is not more than the one bag per bundle of 25 bags or 4 percent of the total number of bags in a bale.

**Specific Requirements:**

The bales containing the bags shall conform to the provisions laid down in table below:

S. No.	Characteristics	Requirements
a)	Total number of bags per bale	400
b)	Number of joined bags per bundle of 25 bags	1
c)	Contract weight of a bale	476 kg
d)	Corrected net weight of a bale	Not less than contract weight.
e)	Moisture regain	20 per cent max.
f)	Oil content on dry de oiled material basis	8 per cent max.

**Note 1** - The number of bags per bale shall be 400, One truck contains 19 bales.

**Note 2** - Contract weight of a bale is calculated as follows:

Contract weight of a bale = Nominal weight of a bag x specified number of bags per bale (Contract weight of a bale specified in the table is on the basis of 1190 gms per bag and 400 bags per bale)

**Note 3** - Corrected net weight of a bale is calculated as follows:

$$\text{Corrected net Weight of a bale} = \frac{\text{Net weight} \times (100 + \text{contract regain, percent})}{100 + \text{Average moisture regain percent}}$$

**Note 4** - The specified oil content value of 8 per cent corresponds to 7.5 per cent when determined on dry de-oiled material plus 20 percent regain basis.

**Contract regain:** The contract moisture regain shall be 20 percent.

**Packing:** The bags shall be packed in bales as laid down in IS 2873-1991. 400 bags will be packed to make one bale. The bale shall be securely bound with steel strip running at right angles to the length of bale. The outside strips shall be approximately 10 to 15 cm from one another and from the strips of the extreme ends. The joint of each strip shall be firm and wrapped with a piece of new jute cloth. The number of strips shall be sufficient in number to pull the bale well. The bale shall be compressed to a density of dead weight volume. However, excessive pressure so as to cause damage to the contents such as press or hoop cutting or crushed selvedge shall be avoided.

**Marking:** The bales shall be marked as laid down in IS 2873-1991. The bales also be marked with the ISI Mark. Name of the mill & Traders identification mark should be legibly marked on each bale.





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**SAMPLING PROCEDURE:** The following minimum number of bales and bags shall be taken at random from the lot and subjected to corresponding tests.

**GROSS WEIGHT:** For evaluating the gross weight of bales, 10 per cent of bales selected from the lot shall constitute the test sample.

**REQUIREMENTS OTHER THAN GROSS WEIGHT:** For assessing the conformity to the requirements, other than gross weight of bales, the number of bales to be selected from the lot shall be in accordance with the following table:

No. of bales in the lot	No. of bales to be drawn and opened for inspection
Upto 10	1
11 to 20	2
21 to 100	3
101 to 150	4
151 to 200	5
201 to 250	6
251 to 300	7
301 to 350	8
351 to 400	9
401 to 500	10

**Weight of Bales:** Determine the total gross weight of the bales in the test sample (A-1) from the gross weight of each bale taken upto the nearest kilogram.

Remove the baling hoops and all other packing materials of the bales and weigh them together upto the nearest kilogram. Calculate the average tare weight of bale and multiply by the number of bales weighed.

The total net weight of bales under test, W

Determine the total corrected net weight (W) of bales under test by:

$$\text{Weight} \times (100 + \text{Contract regain percent})$$

$$\text{Corrected Net Weight } W = \frac{\text{Weight} \times (100 + \text{Contract regain percent})}{(100 + \text{Average moisture regain, per cent of bales})}$$

**Moisture regain:** Determine the moisture regain in each bag on opening the bales by the use of a suitable moisture meter.

**Weight per bag:** Weight per bag to the nearest 5 gm after tests for B-1 and B-2.

**Number of bags and joined bags per bale:** Count the number of bundles of bags in each bale and number of and joined bags in each bundle. From the above determine the total number of bags in each bale under test.



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**LENGTH AND WIDTH:** Lay the bags flat on a table free from creases and wrinkles and measure the outside length and outside width about the centre to the nearest 0.5 cm. Determine the average length and width of the bags under test.

**ENDS AND PICKS:** Count the ends and picks from each bag in one and two places respectively with a suitable gauge measuring 5 cm. Determine the average ends and picks per decimetre of the bags under test in accordance with 7 of IS: 1963-1981.

**BREAKING LOAD OF SACKING:** Test from each bag two warp way and two weft way specimens for breaking load with 100mm wide ravelled strips and 200 mm between grips on a strength tester having a constant rate of traverse of 460 mm (or 18 in) per minute according to 9.1 of IS:1969-1985.

**BREAKING LOAD OF SEAM:** Test one test specimen for breaking load of seam from each side of the bags taking 200mm between grips with the seam near about the using a constant rate of traverse machine operating at 300mm (or 12 in) per minute. Alternatively, a machine having constant rate of traverse of 460 mm (or 18 in) per minute may also be used.

Prepare the test specimens in the form of a double "I" with 100 mm of seam and 50 mm width of fabric.

**OIL CONTENT:** From each bag take one representative strip and determine oil content on dry de-oiled material basis by Soxhlet extraction using trichloroethylene as solvent by the following formula:

$$\frac{\text{Oil content percent on dry de-oiled}}{\text{Material basis}} = \frac{W_1}{W_2} \times 100$$

Where,  $W_1$  = Weight in g, of the extracted material (including natural fat and wax and batching oil); and  $W_2$  = oven-dry weight in g, of the fabric after extraction

**CRITERIA FOR CONFORMITY:** The lot shall be considered as conforming to the requirements of the standard if the following conditions are satisfied:

- The total of the corrected net weight of the bales under test is not less than the total contract weight of the bales.
- The number of bags in each bale under test is not less than the specified number.
- The number of joined bags in each bundle of bags under test is not more than the specified number.
- The average moisture regain per cent of the bags under test is not more than the specified percentage.
- The average oil content of the bags under test is not more than the specified percentage.
- The average outside length of the bags under test is in accordance with the requirement specified.
- The average outside width of the bags under test is in accordance with the requirement specified.



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- h) The weight of the least 90 per cent of the bags under test is in accordance with the requirement specified.
- i) The average ends per decimetre of the bags under test is in accordance with the requirement specified.
- j) The average picks per decimetre of the bags under test is in accordance with the requirement specified.
- k) The average breaking load values of the bags under test for both warp and weft directions are not less than the requirement specified.
- l) The average breaking load of seam of the bags under test is not less than the requirement specified.

**Despatch:** Gunny bags are to be despatched as per mode of transport indicated in the purchase order so as to reach the respective cattle feed factory within the stipulated time. In case of late receipt of Gunny Bags because of genuine reason, the same may be accepted charging penalty as follows, irrespective of market condition. The No. of the bags received at above destination shall be considered as final. Excess Supply up to 10% Excess Quantity shall be accepted against PO.

Delay by	Penalty %	Maximum allowable incident in financial year.
1 to 5 days	1.00	3 Times.
6 to 10 days	3.00	Once.
More than 10 Days	Immediate Cancellation of Purchase Order and 5% Penalty to be recovered from Pending Invoice/ Security Deposit	

Union shall allow such incident of delayed supplies as mentioned on column No. 3 of above table. In case of delay, beyond the above limit (No of days), Union reserves the right whether or not the supply is to be accepted.

In case of Bidder's total failure to supply of material as per the contract, he/she will have to compensate the loss that Union may sustain by way of procuring the material from other sources at higher prices, in addition to forfeiting EMD.

**Force Majeure:** The above Penalty clause No. 3 of recovering the loss from supplier may not be applicable for Force Majeure situation when failure or delay is directly due to an act of God or during restrictions, war, threat of war, hostilities, sanction, blockades/ hurdle on roads, embargo, detention, revolution, riot, strike or other labourer dispute, accident, fire, flood or inability to obtain fuel, power, raw materials, transportation facility or any other cause or circumstance beyond the reasonable control under supplier.

**Despatch Advice:** The bags are to be despatched to the respective cattle feed factory mentioned in PO. On the original invoice/challan you are required to make endorsement. In case the endorsement is not made in the original invoices, your payment shall not be cleared which you may please note.

**Acceptance of Rejected Bags:** Union will accept Gunny Bags as per below:

Range of the corrected	Tolerance (%)	Rate of rebate applicable on
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<b>weight</b>		<b>entire consignment</b>
1190 gms and above	---	Nil
1190 gms to 1130 gms	5%	Nil
1130 gm to 1100 gms	5.0% - 7.5%	Pro-rata deduction based on the invoice value
Below 1100 gms	Less than 7.5 %	<b>Rejection</b>

Gunny bags not conforming to our specifications with regard to short size, improper weaving etc. shall be rejected. However, if our dairies decide to accept such material, the rebate applicable shall be as under:

% of substandard bags observed on the basis of random sampling	Rate of rebate applicable on the quantity of gunny bags found rejectable (% of the landed price of the bags)
1.0% to 1.99%	15 %
2.0% to 2.99%	25 %
3.0% to 3.99%	30 %
4.0 % to 5.0 %	40 %

**Rebate Structure in Case of variation in Ends and Picks**

<b>Sr. No.</b>	<b>Characteristics</b>	<b>As per BIS standard</b>	<b>Variation</b>	<b>Rebate in %</b>
1	Ends	102+/- 6	Upto 96	Nil
			96 to 95	0.20
			95 to 94	0.70
			94 to 93	1.50
			Below 93	Outright Rejection
2	Picks	35+/- 2	Upto 33	Nil
			33 to 32	0.50
			32 to 31	1.00
			31 to 30	1.50
			Below 30	Outright Rejection

In case of rejections, our dairies shall assume no responsibility for any damage to gunny bags if you fail to lift them within 10 days from the date of intimation to you.



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4.2.12 Material Name: Technical Grade Urea (TG Urea) for Industrial Use

SAP Code: CFEED000054

**Specification** Technical Grade Urea (TG Urea)-industrial Grade

Specification For	Tests	Requirement			UOM
		Specification	Max./Min. Limits	with Discount	
Urea-industrial Grade	Nitrogen	Min. 46.40	-		%
	Protein	Min. 290.00	-		%

**Rebate Calculation:** Technical Grade Urea (TG Urea)-industrial Grade

Quality Parameter	Guarantee (%)	up to/ down to	Rebate I (%)	up to/down to	Rebate II (%)
Nitrogen	46.40 (Min)	-	-	-	-
Protein	290.00 (Min)	-	-	-	-

**Sampling process:**

1. The sample should be taken into each consignment bags randomly as per quality Norms.
2. If anyone sample at the time of double sampling fails, whole lot is rejected.

**Note:**

1. Every consignment of material will be accepted only when accompanied by COA.
2. The sample will be tested at In-house lab OR CALF (NDDDB-ANAND). Final decision for additional rebate or acceptance will be as management decision.
3. If sample is tested from outside lab then whole cost of testing will be on supplier's account.

**Special Condition:** Supplier MUST have all valid/legal documentation pertaining for supply of this material. In case of any legal issue the supplier shall be wholly responsible.



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**4.2.13 Material Name: MOLASSES**

SAP Code: MOLAS000001

**Specification: MOLASSES**

Test	Specification	Max./Min. Rebate Limits	Unit
Moisture	26.00 Max.	Up to 30.00	%
Density	1.40 Min	Down to 1.35	g/ml

**Premium/Rebate Calculation: MOLASSES**

If molasses density will be found below 1.35 g/ml so that consignment will be rejected or additional rebate as per union decision.

**Sampling Process: MOLASSES**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	Each consignment	1000 ml

**Special Condition: MOLASSES**

1. The supplier MUST have all valid/legal documentation pertaining for supply of this material. In case of any legal issue the supplier shall be wholly responsible.
2. The Supplier MUST HAVE all legal Licenses and SHOULD Supply a Copy of the same at the time of participating in Tender.
3. The Supplier MUST have all legal requirements in regard of supply of Molasses according to the Regulations of the Prohibition and Excise department according to the State of Gujarat.



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**4.2.14 Material Name: BYPRO-FAT - CATTLE FEED ADDITIVE**

SAP Code: CFEEED000271

**Specification: BYPRO-FAT - CATTLE FEED ADDITIVE**

Test	Specification	Max./Min. Rebate Limits	Unit
Moisture	7.50 Min.	Up to 11.00	%
Fiber	3.00 Min.	Up to 6.00	%
Silica	4.00 Min.	Up to 8.00	%
Albumin	28.00 Min.	Down to 23	%
Oil	33.00 Min.	Down to 28	%
Calcium	3.00 Min.	Down to 2.00	%

**Premium/Rebate Calculation: BYPRO-FAT - CATTLE FEED ADDITIVE**

Quality Parameter	Guarantee (%)	up to/ down to	Rebate 1	up to/ down to	Rebate 2	up to/ down to	Rebate 3
Moisture	7.50 Min.	11.0	1.00				
Fiber	3.00 Min.	6.00	1.00				
Silica	4.00 Min.	8.00	1.00				
Albumin	28.00 Min.	25.00	2.00	23.00	4.00		
Oil	33.00 Min.	30.00	2.00	28.00	4.00		
Calcium	3.00 Min.	2.00	2.00				

**Sampling Process: BYPRO-FAT - CATTLE FEED ADDITIVE**

Frequency	Size of Sample	
	Selection Criteria	Sample Quantity
Each Consignment	40-50% Bags	1000 g



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## 5.0 Test Methods

Raw material, additives & packing material will be analyzed for its conformity to the laid down requirement. Following references is used to prepare the test method. For specific instrument like Dickey John/Foss NIR procedure provided by the manufacturer is used as reference.

Samples for testing would be drawn from each bag of each consignment and results of our laboratory shall be considered as final. A copy of testing reports shall be shared to the supplier.

In case of dispute on quality reports, the supplier needs to arrange testing of the samples drawn by the Union at Centre for Analysis & Learning in Livestock & Food (CALF), Near IRMA Gate, Anand 388 001. In such a case the Supplier will have to bear the cost of testing. (For Moisture, retesting is not allowed)

The quality reports received from the mutually agreed lab or CALF would be considered as final.

In case the goods fail the test as per the specifications prescribed, the supplier will replace the goods as per specifications within the delivery time period OR Union may accept with proportionate rebate / penalty as deemed fit

### 5.1 References of Testing Methods

Sr. No.	Test	Reference
1	Sample Size	IS:2052-1979, APPENDIX C
2	Moisture	IS 7874 (Part-I): 1975
3	Protein	IS 7874 (Part-I): 1975
4	Fat	IS 7874 (Part-I): 1975
5	Crude Fiber	IS 7874 (Part-I): 1975
6	Silica	IS 7874 (Part-I): 1975
7	Calcium	NDDB Manual
8	Phosphorus	NDDB Manual
9	Urea	NDDB Manual
10	Vitamin-A	NDDB Manual
11	Vitamin-D	NDDB Manual
12	Density	NDDB Manual
13	Infestation	IS 7874 (Part- I) : 1975





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14	Dust	IS 7874 (Part- I) : 1975
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### 5.2 Reference Test Method of Raw Materials

S. No.	Product Name	Reference Test Method								
		Moisture	Crude Protein	Crude Fat	Crude Fiber	Total Ash	Silica	Ca	P	Other
1	Grains, Juwar, Maize, Damage wheat, Bajri, Barely etc	12								23. Infestation 24. Dust
2	Rice Polish Fine	12, 11	13	14		16	17			
3	Deoiled Rice Bran	12, 11	13, 11	14, 11	11	16	17, 11			
4	GuarBhardo/ Chuni/ Babul Chuni / Tamarind seed powder	12,11	13	14	15,11	16	17,11			
5	Oil seed extractions and cakes	12,11	13,11	14,11	15,11	16	17			
6	Purn milk magic /SAGAR BOOSTER	25				16	17	18	19	Material will be accepted on the basis of COA results
7	Calcite powder	12				16	17	18		26 Mesh Size
8	Grinding Salt	12								27 Purity
9	Urea/M M SRN/Optigen		13							Material will be accepted on the basis of COA results



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S. No.	Product Name	Reference Test Method								
		Moisture	Crude Protein	Crude Fat	Crude Fiber	Total Ash	Silica	Ca	P	Other
10	VitaminAD3/ Vitamin AD3 – Double strength									Material will be accepted on the basis of COA results
11	Groundnut Shell Powder	12				16	17			26 Retention time
12	Dhania Husk	12				16	17			
13	Molasses/Myco curb AW DS	12								20 Density
14	Wheat Bran	12				16	17			
15	Bioplex High Seven Organic Mineral Mixture									Material will be accepted on the basis of COA results
16	Bypass Fat Feed	12	By difference					ICP-OES		GC-FID (By NDDDB)

~ End of DOCUMENT NO.: GTC/CFP/0022/1/0221 ~