
VEGETABLE OIL CAKES (EXPRESSED OR SOLVENT EXTRACTED) (GRADING AND MARKING) RULES, 1979

CONTENTS

1. Short title and application
2. Definition
3. Grade designations
4. Definition of quality
5. Grade designation marks
6. Method of marking
7. Method of packing
8. Special conditions of certificate of authorisation

SCHEDULE 1 :- SCHEDULE I

SCHEDULE 2A :- SCHEUULH II-A

SCHEDULE 2B :- SCHEDULE II-B

SCHEDULE 3A :- SCHEDULB III-A

SCHEDULE 3B :- SCHEDULE III-B

SCHEDULE 3C :- SCHEDULE III-C

SCHEDULE 4A :- SCHEDULE IV-A

SCHEDULE 4B :- SCHEDULE IV-B

SCHEDULE 5A :- SCHEDULE V-A

SCHEDULE 5B :- SCHEDULE V-B

SCHEDULE 6A :- SCHEDULE VI-A

SCHEDULE 6B :- SCHEDULE VI-B

SCHEDULE 7A :- SCHEDULE VII-A

SCHEDULE 7B :- SCHEDULE VII-B

SCHEDULE 8A :- SCHEDULE VIII-A

SCHEDULE 8B :- SCHEDULE VIII-B

SCHEDULE 9A :- SCHEDULE IX-A

SCHEDULE 9B :- SCHEDULE IX-B

VEGETABLE OIL CAKES (EXPRESSED OR SOLVENT EXTRACTED) (GRADING AND MARKING) RULES, 1979

In exercise of the powers conferred by Section 3 of the Agricultural Produce (Grading and Marking) Act, 1937 (1 of 1937) the Central Government, in supersession of the Oil Cakes (Grading and Marking) Rules, 1962, hereby makes the following rules, namely :

1. Short title and application :-

These rules may be called Vegetable Oil Cakes (Expressed or Solvent Extracted) (Grading and Marking) Rules, 1979.

2. Definition :-

In these rules,

(a) "Agricultural Marketing Adviser" means the Agricultural Marketing Adviser to the Government of India;

(b) "Schedule" means a Schedule appended to these rules.

3. Grade designations :-

The grade designations to indicate the quality of oil cakes (expressed or solvent extracted) shall be as set out in column (1) of Schedules II-A to IX-B.

4. Definition of quality :-

The quality indicated by the grade designation shall be as set out against each grade designation in Schedules II-A to IX-B.

5. Grade designation marks :-

The grade designation mark shall consist of a label bearing the design set out in Schedule I and specifying the grade designation, the name of the cake and whether it is expressed or solvent extracted.

6. Method of marking :-

(1) The grade designation mark shall be securely affixed or stenciled on each container in a manner approved by the Agricultural Marketing Adviser and shall also indicate the number of the Certificate of Authorisation issued to the packer by the Agricultural Marketing Adviser.

(2) In addition, on every container the following particulars shall clearly and indelibly be marked:

(a) Lot number,

(b) Name of packer,

(c) Date of packing,

(d) Place of packing.

(3) The authorised packer may, after obtaining the prior approval of the Agricultural Marketing Adviser, mark his private trade mark on the container in a manner approved by the said officer, provided that the private trade mark does not represent quality or grade of the oil cake different from that indicated by the grade designation mark affixed to the container in accordance with these rules.

7. Method of packing :-

(i) The oil cake shall be packed only in container made of jute or other material approved by the Agricultural Marketing Adviser from time to time.

(ii) Each container shall be securely closed and sealed and shall contain oil cake of one trade description and of one grade designation only.

8. Special conditions of certificate of authorisation :-

In addition to the conditions specified in rule 4 of the General (Grading and Marking) Rules, 1937, the following conditions shall also be the conditions of every Certificate of Authorisation issued for the purpose of these rules, namely :

(i) Each authorised packer shall take all precautions to avoid admixture oil cakes with castor seeds and castor cake.

(ii) if an .authorised packer handles more than one type of oil cake in the same premises, adequate precautions shall be taken by him to avoid mixing of different oil cakes.

(iii) the authorised packer shall make such arrangements for testing oil cake as may be specified from time to time by the Agricultural Marketing Adviser and shall also maintain proper records of analysis of the samples.

(iv) all instructions regarding methods of sampling and analysis, packing and marking and maintenance of records, which may be issued from lime to time by the Agricultural Marketing Adviser, shall be observed.

(v) a sample of oil cake drawn in the manner prescribed by the Agricultural Marketing Adviser from each lot, shall be forwarded to such control laboratory as may be notified from time to time.

SCHEDULE 1

SCHEDULE I

(See rule 5) Grade designation mark

SCHEDULE 2A

SCHEUULH II-A

(See rules 3 and 4) .								
Grade designations and definitions of quality of groundnut oil cakeexpressed								
Grade	Mois	Crude	Crude	Crude	Total	Acid	Castor	General
Desig	ture	pro	fat or	fibre,	ash	inso	husk	characteristics
nations	per	tein	ether	per	per	luble		
	cent.	nitro-	extra	cent.	cent.	ash per		
	by	gen x	ct per	by	by	cent.		
	wei	6.25	cent.	weight	weight	by		
	ght	per	by	(Maxi	(Maxi	weight		
	(Maxi	cent.	weight	mum)	mum)	. (Maxi		
	mum)'	by	(mini			mum)		
		wei	mum)					
		ght						
		(Mini						
		mum)						
1	2	3	4	5	6	7	8	9
Good	8.0	50.0	8.0	9.0	7.0	1.5	Nil	1. Oil cake of good and fair
Fair	8.0	50.0	5.0	9.0	7.0	2.0	Nil	grade shall be the pro-
Ghani	10.0	45.0	10.0	9.0	7.0	2.5	Nil	mete of decorticated gro-
Cake								undnut alone obtained
								after the extraction of oil
								by power driven
								machinery.
								2. Ghani oil cake shall be

							the product of decorticated groundnut alone
							obtained after the extraction of oil by- animal driven ghani or chakki.
							3. The material shall be of firm texture.
							4. It shall be free from harmful constituents and castor cake or husk.
							5. It shall be free from rancidity, adulterant, insect or fungus infestation and form fermented. mustyr or other objectionable odour.
							6. It shall be free from dirt and extraneous matter.

NOTE-.The values specified in columns 3 to 7 are calculated on moisture free basis. Adopted from the Indian Standards Specification for decorticated groundnut oil cake as livestock feed (IS : 1713-1960)

SCHEDULE 2B
SCHEDULE II-B

(See rules 3 and 4)							
Grade designations of solvent extracted groundnut oil cakes							
Grade designation	Moisture per cent.	Crude protein (nitrogen x 6.25) by weight (Maximum)	Crude fat or ether extract per cent.	Crude fibre per cent.	Acid insoluble ash per cent.	Castor husk'	General characteristics
1	2	3	4	5	6	7	8.
Good	10.0	51.0	1.0	10.0	2.5	'Nil	1. The solvent extracted groundnut oil cake (meal) shall be obtained by extraction of oil by means of a solvent from the expeller or ghani pressed groundnut oil cake. The meal may also be obtained directly from groundnut seeds after a preliminary treatment.
Fair.	10.0	40	1.5	- .1.2:0	2-5	Nil	

							The
							expeller or ghani pressed
							groundnut oil cake used for
							extraction shall have been
							obtained by pressing clean
							and sound groundnut
							(Arachis hypogea L). The
							meal shall have been
							subjected to heat and steam
							treatment under controlled
							and
							regulated conditions so
							as to
							prevent denaturation of the
							protein and removal of
							traces
							of solvent. The material
							shall
							be in the form of either
							flakes
							or powder and shall be
							free
							from harmful
							constituents
							and castor cake or husk
							or
							both or mahua cake. It
							shall
							be free from rancidity,
							adulte
							ants. insects or fungus
							infes
							tation and from musty
							odour.
NOTES.-	- 1.	values	in	3 to 6	are	on	free basis. Adopted from
	The	specified	columns		calculated	moisture	

the Indian Standards Specification for solvent extracted oil cake (meal) as Livestock feed (IS:3441-1966).

2. Solvent for extraction : Only Good grade solvent shall be used for the purpose of extraction. The requirements of the solvent shall be as follows :

Boiling range 63°C to 71°C. Aromatic content maximum 1 per cent. Non-volatile content.

maximum 0.001 g./100 ml.

SCHEDULE 3A
SCHEDULE III-A

(See rules 3 and 4)								
Grade designations and definitions of quality of decorticated cotton seed oil cake expressed								
Grade	Mois	Crude	Crude	Crude	Total	Acid	Castor	General
Desig	ture	pro	fat or	fibre,	ash	inso	husk	characteristics
nation	per	tein	ether	per	per	luble		
	cent.	(nit	extra	cent	cent	ash. per		

	by wei ght (Maxi mum)	rogen x6.25) per cent. by Wei ght (Mini mum)	ct per cent. by weight (Mini mum)	by wei- ght (Maxi mum)	by weight (Maxi mum)	cent. by weight (Maxi mum)		
1	2 .	3	4	5	6	7	8	9
Good	8.0	40.0	8.0	10.0	7.0	1.5	Nil	1. Shall be the product of
Fair	8.0	41.0	5.0	12.0	8.0 .	2.0	Nil	clean cotton seed only,
No:	8.0	37.0	5.0	14.0	9.0	2.5	Nil	composed principally of
2								the kernel with such un
								avoidable portions of the
								hull and fibre as may be
								left in the course of
								manufacture of oil.
								2. The material shall be
								firm but not flinty in
								texture.
								3. It shall be free from
								harmful constituents and
								castor cake or husk.
								4. It shall be free from
								rancidity, adulterants,
								insects or fungus infes
								tation and from fermen
								ted, musty or other
								objectionable odour.
								5. It shall be free from dirt
								and extraneous matter.
Note.The values specified in columns 3 to 7 are calculated on moisture free basis. Adopted from the								
Indian Standards Specification for cotton seed oil cake as Livestock feed (IS : 1712-1960).								

SCHEDULE 3B
SCHEDULE III-B

(See rules 3 and 4)								
Grade designations and definitions of quality of undecorticated cotton seed oil cake-expressed.								
Grade	Mois	Crude	Crude	Crude	Total	Acid	Castor	. General
Desig	ture	pro	fat or	fibre.	ash	inso	husk	characteristics
nation	per	tein	ether	per	per	luble		
	cent.	(nitro	extra	cent.	cent.	ash per		
	by	gen x	ct per	by	by	cent.		
	wei	6:25)	cent.	weight	weight	by		-
	ght	per	by	(Maxi.	(Maxi	weight		
	(Maxi	cent.	weight	mum)	mum)	(Maxi		
	mum)	by	(mini			mum)		
		wei	mum)					
		ght						
		(Mini						

1	2	3	4	5	6	7	8	9
Good	10.0	24.0	7.0	24.0	9.0	2.5	Nil	1. Shall be the product resulting from the whole clean and wherever necessary, delinted (especially in the case of fuzzy seeds) cotton seed only after the expression of oil. 2. The material shall be firm but not flinty in texture. 3. It shall be free from harmful constituents and castor cakes or husk. 4. It shall be free from rancidity, adulterants, insects or fungus infestation and from termen-ted. musty or other objectiona-ble odour. 5 Shall be free from dirt and extrancous matter.
Fair	10.0	24.0	7.0	28.0	9.0	2-5	Nil	

NOTE-.The values specified in columns 3 to 7 are calculated on moisture free basis. Adopted from Indian

Standards Specification for cotton seed oil cake as Livestock feed (IS: 1712-1969).

SCHEDULE 3C
SCHEDULE III-C

^ \ (See rules 3 and 4)						
Grade designations and definitions of quality of decorticated cotton seed oil cake (meal) - solvent extracted						
Grade	Mois	Crude	Crude	Crude	Acid in	General
Desig-	ture	pro	fat or	fibre,	soluble	characteristics
na-	per	tein	ether	per	ash	
tion	cent.	(Nitro-	extra-	cent.	percent.	
	by wei	genx	ct per	by wei-	by	
	ght	6.25)	cent.	ght	weight	
	(Maxi	per	by	(Maxi	(Maxi	
	mum)	cent.	weight	mum)	mum)	
		by	(Maxi			
		weight	mum)			
		(Mini				
		mum)				
1	2	3	4 ,	5	6	7
Good	8.0	42.0	1.5	12.0	2.0	The solvent extracted cotton seed oil cake (meal) shall be obtained by extraction of oil by means of a solvent from decorticated cotton wed oil cake. The meal may also be obtained
Fair	8.0	40.0	2.0	.24.0	2.5	

									directly from decorticated cotton seed after a certain preliminary treatment.
									Cotton seed oil cake used for extraction shall have been obtained by pressing clean and sound decorticated cotton seed. The meal shall have been subjected to heat and steam treatment under controlled and regulated conditions so as to remove traces of solvent. The meal shall be in the form of either flakes or powder and shall be free from harmful constituents and castor cake or husk or both or- mahucake. It shall be free from musty odour.

Notes.1. The values specified in Columns 3 to 7 are calculated on moisture free basis. Adopted from

Emergency Indian Standards Specifications for solvent extracted cotton seed oil cake (meal) as livestock feed (IS: 3592-1966)

2. Solvent from Extraction : only hexane-food grade solvent shall be used for the purpose of

extraction The requirement of the solvent shall be as follows:

Boiling range 63 C to 71C.

Aromatic content Max.....1 pur cent.

Non volatile content MAX.....0.001 gm/100ml.

SCHEDULE 4A

SCHEDULE IV-A

(See roles 3 and 4)								
Grade designations and definitions of quality of Linseed Oil Cake (Meal) expressed								
Grade	Mois	Crude	Crude	Crude	Total	Add	Castor	General
Desig	ture	pro	fat or	fibre,	ash	inso	husk	Characteristics
nations	per	tein	ether	per	per	luble		
	cent.	(nitro-	extra	cent.	cent.	ash		
	'by	genx	ct per	by	by	cent.		
	wei	6.25)	cent.	weight	weight	by		
	ght	per	by	(Maxi.	(Maxi	weight		
	(Maxi	cent.	weight	mum)	mum)	(Maxi		
	mum)	by	(mini			mum)		
		wei	mum)					
		ght						
		(Mini						
		mum)						
1	2	3	4	5	6.	7	8	9
Good	10.0	29.0	8.0	10.0	8.0	1.5	Nil	1. Oil 'cake of good and fair
Fair	10.0	29.0	5,0	10.0	8.0	1.5	Nil	grades shall be the pro
Ghani	10.0	26.0	15.0	6.0	9.0	2.5	Nil	duct obtained after the
Cake								extraction of oil from
								linseed by power driven
								machinery.
								2. Ghani oil cake shall be

							the product obtained after the extraction of oil
							from the linseed by
							animal driven ghani.
							3. The material shall be
							free from harmful
							constituents and castor
							cake or husk.
							4. It shall be free from
							rancidity, adulterants,
							insect or fungus
							infestation and from
							fermented, musty or
							other objectionable
							odour.
							5. It shall be free from dirt
							and extraneous matter.

NOTE. The -values specified in columns 3-to 7 are calculated on moisture free basis.
Adopted from the

Indian Standards Specifications from linseed oil cake as livestock feed (IS : 1935-1961).

SCHEDULE 4B

SCHEDULE IV-B

(See rules 3 and 4)						
Grade designations and definitions of quality of linseed oil cake solvent extracted						
Grade	Mois	Crude	Crude	Crude	Acid	General
Desig	ture	pro	fator	fibre, -	insolu-	characteristics ,.
na	per.	tein	ether	per	bicash	
tions	cent.	(nitro-	extra	cent.	per	
	by wei	gen x	ct per	by wei	bywei	
	ght	6.25)	cent.	ght .	ght	
	(Maxi	per	by	(Maxi	mum) -	
	mum)	cent.	weight	mum)		
		by	(Maxi			
		weight	mum)			
		(Mini				
		mum)				
1	2	3	4	5	6	7
Good	10.0	33.0	1.0	9.0	2.5	The- solvent, extracted linsed oil cake
Fair-	- 10,0	29.0.	1.5	..11.0	2.5.	.(meal) shall be obtained by extraction
	..					of
						oil, by means of solvent from the
						expeller
						or ghani pressed linseed oil cake. The
					..	meal .may also be obtained directly
						from
						linseeds after a certain preliminary
						treatment. The extraction shall have
						been
						obtained by pressing clean and sound

						linseed (<i>Linum-ustatissimum</i> L). The meal shall have been subjected to heat and steam treatment under controlled and regulated conditions so as to prevent denaturation of the protein and to remove traces of solvent. The material shall be in the form of either flakes or powder and shall be free from harmful constituents and castor cakes or husk or both or mahua cake. It shall be free from rancidity, adulterants, insects/or fungus infestation and from musty odour.
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Notes-1. The values specified in columns 3 to 6 are calculated on moisture free basis. Adopted from

the Indian Standards Specification for solvent extracted linseed oil cake (meal) as livestock

feed(IS:3440-1966).

2.Solvent for extraction : Only hexane food grade solvent shall be used for the purpose of

extraction. The requirements of the solvent shall be as follows:

Boiling range 63°C to 71°C

Aromatic content max. 1 per cent.

Non-volatile content, max. 0.001 gm/100ml.

SCHEDULE 5A

SCHEDULE V-A

(See rules 3 and 4)								
Grade designations and definitions of quality of Mustard Oil Cake expressed.								
Grade	Mois	Crude	Crude	Crude	Total	Acid	Castor	General
Desig	ture	pro	fat or	fibre,	ash	inso	husk	characteristic!
nations	per	tein	ether	per	per	luble		
	cent.	(nitro-	extra-	cent.	' cent.	ash		
	by	fea x	ctpcr	by	by	per		
	wei	6.25)	cent.	weight	weight	by		
	ght	per	by	(Maxi.	(Maxi	weight		
	(Maxi-	ceat.	weight	mum)	mum)	(Maxi		
	mum	by	(mini			mum)		
		wei	mum)					
		ght						
		(Mini-						
		mum)						
1	2	3	4 .	5	6	7	8	9
Good,	10,0	35.0	8.0.	9,0	8.0	8.0	Nil	1: Oil cake of good and fair
Pair	10.0	37.0	5,0	10.0	9.0	2.0	Nil	grades shall be the pro
Ghani	12.0 .	33.0	12.0	7.0	8.0	2.5	Nil	duct obtained after the
Cake								extraction of oil from
								mustard seed* by

							power-driven machinery.
							2. Ghani oil cake shall be
							the product obtained
							after the extraction of oil
							from mustard seed* by
							animal driven ghani or
							kolhu.
							3. The material shall be
							free from harmful consti-
							tuents including
							argemone and castor
							cake or husk.
							4. It shall be free from
							rancidity, adulterants,
							insects or fungus
							infestation and from
							fermented musty or
							other objectionable
							odour.
							5. It shall be free from
							din
							and extraneous matter.

NOTE:.*The term mustard seed includes rai (Brassica juncea coss), Sarson (Brassica compestris Var

Sarson), toria (N Brassica Compestris Var Toria) and taramira (Eruca Saliva). The values

specified in columns 3 to 7 are calculated on moisture free basis adopted from the Indian

Standards Specifications for mustard and range rape oil cake as livestock feed (IS: 1932-1961)

SCHEDULE 5B

SCHEDULE V-B

(See rules 3 and 4)						
Grade designations and definitions of quality of mustard cake-solvent extracted						
Grade	Mois	Crude	Crude	Crude	Acid in	General characteristics
desig	ture	protein	fat or	fibre	soluble	
nation	pel-	(nitro	ether	per	ash per	
	cent,	gen x	extra	cent. by	cent. by	
	by					
	weight	6.25)	ct per	weight	weight	
	(Maxi	per	cent.	(Maxi	(Maxi	
	mum)	cent.	by wei	mum)	mum)	
		by wei	ght			
		ght	(Maxi			
		(Maxi	mum)			
		mum)				
1	2	3	4	5	6	7
Good	10.0	45.0	1.0	11.0	1.8	The. solvent extracted mustard
Fair	10.0.	43.0	1.5	12.0	2.3	oil cake (Meal) shall be obtained

								and
Fair	10.0	37.0	5.0	7.0	13.0	2.0	Nil	fair grades, shall be the
Ghani	10.0	36.0	14.0	7.0	13.0	2.0	Nil	products, obtained after
Cake								the extraction of oil from
								sesamum (til) seed by
								power-driven machinery.
								2. Ghani cake shall be the
								product obtained after
								the extraction of oil from
								sesamum (til) seeds by
								animal driven ghani.
								3. The material shall be
								free from harmful
								constituents and castor
								cake or husk.
								4. It shall be free from
								rancidity, adulterants,
								insects or fungus
								infestation and from
								fermented musty or
								other objectionable
								odour.
								5. It shall be free from dirt
								of extraneous matter.

NOTE. The values specified in columns 3 to 7 are calculated on moisture free basis. Adopted from the

Indian Standards Specifications for sesamum (til) oil cake as Livestock feed (IS : 103 1934-1961).

SCHEDULE 6B

SCHEDULE VI-B

(See rules 3 and 4)						
Grade designations and definitions of quality of sesamum (til) oil-cake-solvent extracted						
Grade designation	Moisture	Crude protein (nitrogen x 6.25)	Crude fat or ether extract per cent.	Crude fibre per cent. by weight).	Acid insoluble ash per cent. by weight	General characteristics
	per cent, by weight	per cent.	per cent.	(Maximum)	(Maximum)	
	(maximum)	per cent. by weight	per cent. by weight (Maximum)	(Maximum)	(Maximum)	

	by weight (Maximum)	nitrogen content by weight (Minimum)	per cent. by weight (Maximum)	by weight (Maximum)	by weight (Maximum)	per cent. by weight (Maximum)		
1	2	3	4	5	6	7	8	9
Good	10.0	21.0	8.0	12.0	8.0	1.5	Nil	1. Coconut oil cake of grade
Ghani	12.0	18.0	13.0	12.0	8.5	2.0	Nil	good shall be the product
								obtained after the extraction of oil from copra (dried coconut kernels) by power driven machinery.
								2. Ghani grade oil cake shall be the product obtained after the extraction of oil from copra (dried coconut kernels) by the animal driven ghani or chakki.
								3. The material shall be free from harmful constituents and castor cake or husk.
								4. It shall be free from rancidity, adulterants insects or fungus infestation musty and other objectionable odour.
								5. It shall be free from dirt and extraneous matter.

NOTE. The values specified in columns 3 to 7 are calculated on moisture free basis. Adopted from the

Indian Standards Specification for coconut oilcake as Livestock feed (IS : 21541962).

SCHEDULE 7B

SCHEDULE VII-B

(See rules 3 and 4)

Grade designations and definitions of quality of coconut oil-cake (meal) solvent extracted

Grade designation	Moisture per cent. by weight (Maximum)	Crude protein (Nitrogen by weight (Minimum))	Crude fat or ether extractable (Maximum)	Crude fibre per cent. by weight (Maximum)	Acid insoluble per cent. by weight (Maximum)	General characteristics .
1	2	3	4	5	6	7
Good	10.0	23.0	1.0	14.0	1.5	The solvent extracted coconut oil
Pair	10.0	21.0	1.5	15.0	2.0	cake (meal) shall be obtained by extraction of oil by means of a solvent from the expeller or ghani pressed coconut oil cake. The expeller or ghani pressed coconut oil cake used for extraction shall have been obtained by pressing clean and sound coconut. The meal shall have been subjected to heat and steam treatment under controlled and regulated conditions, so as to remove traces of solvent. The material shall be in the form of either flakes or powder. It shall be free from harmful constituents and easier cake or husk or both and mahua cake. It shall be free from rancidity,

							after
							the expression of oil
							from clean and sound
							Safflower seeds.
							(Certhamus tinctorious
							L) by animal driven
							ghani or chakki.
							3. The material shall be Of
							firm texture.
							4. It shall be free from
							harmful constituents and
							castor cake or husk.
							5. It shall be free from
							rancidity adulterants and
							insects or fungus
							infestation and from
							' fermented musty or
							other objectionable
							odour.
							6. It shall be free from dirt
							and extraneous matter.
NOTE. The values specified in columns 3 to 7 are calculated on moisture free basis.							

SCHEDULE 8B
SCHEDULE VIII-B

(See rules 3 and 4)						
Grade designations and definitions of quality of safflower oil-cake-solvent extracted						
Grade designation	Moisture	Crude protein	Crude fat or other	Acid insoluble ash	Crude fibre	General characteristics
	per cent. by weight	(nitrogen x 6.25)	extra ct per cent. by weight	cent. by weight (Maximum)	per cent. by weight (Maximum)	
		per cent. by weight	(Maximum)	(Maximum)	(Maximum)	
		weight	(Maximum)			
		(Minimum)	(Minimum)			

		mum)				
1	2	3	4	5	6	7
Good	10.0	50.0	1.0	1.5	15.0	The solvent extracted safflower
Fair	10.0	47.0	1.0	2:5	18.0	oil cake (meal) shall be obtained
						by extraction of oil by means of a
						solvent from the ghani or expeller
						pressed safflower oil cake. The
						ghani or ex-peller pressed safflower
						oil cake shall have been
						obtained by pressing clean and
						sound safflower seeds (Carthamus
						tinctorios L). The extracted oil
						cake (meal) shall have been sub-
						jected to heat and steam treatment
						undercontrolled and regulated
						conditions so as to prevent
						denaturation of the protein and to
						remove traces of solvent. The material
						shall be in the form of either
						flakes or powder and shall be free
						from harmful constituents or
						casinates, tor cake or husk or both or
						mahua cake. It will be free from
						rancidity, adulterants, insect or fungus
						infestation and from musty odour.
NOTES,1. The values specified under columns 3 to 6 are on moisture free basis.						
2. The specifications are at draft stage with the Indian Standards Institution and not yet finalised.						
3. Solvent for extraction : Only hexane food grade solvent shall be used for the purpose of						
extraction. The requirements of the solvent shall be as follows :						
' Boiling range 63°C to 71°C.						
' Aromatic content max. 1 per cent.						
Non-volatile content max.0.001gms/100ml.						

SCHEDULE IX-A

(See rules 3 and 4)								
Grade designations and definitions of quality of niger seed oilcakeexpressed								
Grade	Mois	Crude	Crude	Crude	Total	Acid	Castor	General
Desig- nations	ture per cent.	pro tein (nitro gen x 6.25) per cent.	fat or ether extra ct per cent.	fibre. per cent.	ash per, cent.	inso luble ash per cent.	husk	characteristics
	by wei ght (Maxi mum)	by wei ght (Mini mum)	by wei ght (Maxi mum)	by wei ght (Maxi mum)	by wei ght (Maxi mum)	by wei ght (Maxi mum)		
1	2	3	4	5	6	7	8	9
Good	9.0	29.0	8.0	9.0	8.0	1.0	Nil	1. Oil cake of good and fair
Fair	9.0	23.0	10.0	12.0	8.0	2.0	Nil	grades shall be the pro
Ghani cake	10.0	27.0	13.0	9.0	8.0	1.0	Nil	duct of niger seeds (Gui- zotia a byssinica cass)
								obtained after the extrac
								tion of oil from sound
								and clean nigerseeds by
								power driven machinery'.
								2. Ghani oil cake shall he
								product obtined after
								the extraction of oil from
								clean and sound niger
								seeds (Guizolia abys-
								sinica cass) by animal
								driven Ghani or chakki.
								3. The material shall be in
								firm texture.
								4. It shall be free from

					(Guizotia' abyssinica cass). The meal shall
					have been subjected to heat and
					steam treatment under controlled
					and regulated conditions so as to
					prevent denaturation of the
					protein and to remove traces of
					solvent. The 'material shall be
					free from harmful constituents of
					castor cake or husk or both or
					mahua cake. It shall be free from
					rancidity, adulterants, insects or
					fungus infestation and from
					musty odour.

NOTE:-1. The values specified in columns 3 to 6 are on moisture free basis.

2. The specifications are at draft stage with Indian Standards Institution and not yet finalised.

3. Solvent for extraction '. Only hexane food grade solvent shall be used for the purpose of

extraction. The requirements of the solvent shall be as follows :

Boiling range 63°C to 71°C.

Aromatic content max.: 1 per cent.

Non-volatile content max: 0.001 gms/100ml.