

**4RF21
certificate****Complete feed
for MICE and RATS****DESCRIPTION**

Complete feed for MICE and RATS
Maintenance for short and middle period
Shape: pellet 12 mm

INGREDIENTS

(Listed in descending order of inclusion)

Wheat, Maize, Soybean meal extracted toasted, Corn gluten feed, Wheat straw, Fish meal, Lucerne meal, Mineral dicalcium phosphate, Calcium carbonate, Sodium chloride, Whey powder, Soybean oil, Yeasts

DIRECTION FOR USE

Administer the dry product *ad libitum* to mice and rats housed for short and middle terms studies with drinking water always available

ADDITIVES

Choline Chloride, D,L-Methionine, Vitamins and Oligominerals

STORAGE

Keep cool and dry

**Contact MUCEDOLA
for further details**

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PACKAGING and SHELF LIFE

Paper bags kg 12.5	9 months from DOM (Date of Manufacture)
Vacuum packed kg 20 (4 x kg 5) kg 10 (2 x kg 5)	24 months from DOM (Date of Manufacture)
Irradiated Vacuum packed kg 20 (4 x kg 5) kg 10 (2 x kg 5)	24 months from DOM (Date of Manufacture)



Proximate Analysis

	U.M	Typical Analysis
Moisture	%	12.00
Crude Protein	%	18.50
Crude Oil	%	3.00
Crude Fibre	%	6.00
Ash	%	7.00
NFE	%	53.5

Carbohydrates

	U.M	NATURAL	ADDED	TOTAL
Starch	%	42.63	-	42.63
Sucrose	%	3.68	-	3.68

Energy

	U.M	TOTAL
Gross Energy	kJ/kg	16200
	kCal/kg	3876
Metabolisable Energy	kJ/kg	11150
	kCal/kg	2667
Atawater Fuel Energy	kJ/g	13.17
	kCal/g	3.15

Amino Acids

	U.M	NATURAL	ADDED	TOTAL
Arginine	%	1.09	-	1.09
Lysine	%	0.97	-	0.97
Methionine	%	0.33	0.14	0.47
Cystine	%	0.39	-	0.39
Tryptophan	%	0.28	-	0.28
Histidine	%	0.50	-	0.50
Threonine	%	0.72	-	0.72
Isoleucine	%	0.84	-	0.84
Leucine	%	1.57	-	1.57
Phenylalanine	%	0.89	-	0.89
Valine	%	0.96	-	0.96
Tyrosine	%	0.65	-	0.65
Glycine	%	0.87	-	0.87
Serine	%	0.91	-	0.91

Fatty Acids

Saturated Fatty Acids	U.M	TOTAL
C12:0 Lauric	%	0.006
C14:0 Myristic	%	0.030
C16:0 Palmitic	%	0.383
C18:0 Stearic	%	0.084
Mono-unsaturated Fatty Acids	U.M	TOTAL
C16:1 Palmitoleic	%	0.024
C18:1 ω9 Oleic	%	0.511
Poly-unsaturated Fatty Acids	U.M	TOTAL
C18:2 ω6 Linoleic	%	1.298
C18:3 ω3 Linolenic	%	0.247

Mineral and Trace Elements

	U.M	NATURAL	ADDED	TOTAL
Ca	%	0.32	0.59	0.91
P total	%	0.49	0.24	0.73
Na	%	0.14	0.22	0.36
Cl	%	0.10	0.33	0.43
K	%	0.77	-	0.77
Mg	%	0.19	-	0.19
Fe	mg/kg	301	180	481
Cu	mg/kg	14.17	11.70	25.87
Mn	mg/kg	32.07	54	86.07
Zn	mg/kg	35.71	67.50	103.21
I	µg/kg	69	900	969
Se	µg/kg	265	-	265

Vitamins

	U.M	NATURAL	ADDED	TOTAL
VIT A	IU/kg	3669	14400	18069
VIT D3	IU/kg	-	1260	1260
VIT E	mg/kg	16.71	49.5	66.21
VIT B1 Thiamine	mg/kg	4.02	13.5	17.52
VIT B2 Riboflavin	mg/kg	2.35	6.70	9.05
VIT B6 Pyridoxine	mg/kg	3.95	6	9.95
VIT B12 Cyanocobalamin	µg/kg	15.11	27	42.11
VIT K Menadione	mg/kg	0.37	2.80	3.17
Folic Acid	mg/kg	0.43	1.90	2.33
Nicotinic Acid	mg/kg	39.85	55	94.85
Pantothenic Acid	mg/kg	11.35	14.40	25.75
Choline	mg/kg	1305	641	1946
Biotin	µg/kg	710	279	989
Inositol	mg/kg	64	-	64

NATURAL: Nutrient data represent the best information available; they have been calculated from published values and from analytical testing of raw materials and finished product.

The values could vary due to the natural variations in the ingredients and process.

ADDED: Supplements of amino acids, vitamins, and minerals

TOTAL: The calculated values

ATAWATER FUEL ENERGY (kcal/g) = [(Crude Oil% x 9) + (Crude Protein% x 4) + (NFE% x 4)]/100



Product Standard Diet 4RF21 certificate Complete feed for MICE and RATS	Date of issue February 8th, 2000	Revision 5
Reference SPECIFICATION	Update September 27th, 2010	Page 1/1

Product name: **Standard Diet 4RF21 certificate Complete feed for MICE and RATS
Maintenance for Short and Middle Period**

Packing: paper bags/boxes
 Specification n°: **PF1610**

Sensory analysis

Shape: pellet or flour
 Color: hazel
 Smell: characteristic

Analysis

Parameters	U.M.	Typical analysis	Min	Max	Method of analysis
Total Viable Organism	UFC/g			20000	MUC.CBT
Total Viable Organism (irradiated)	UFC/g			10	MUC.CBT
<i>Clostridium perfringens</i>	UFC/g			10	MUC.PERF
Total coliforms	UFC/g			10	MUC.COL
<i>E.coli</i>	UFC/g			10	MUC.E.coli
Enterobacteriaceae	UFC/g			100	MUC.ENTBAT
Enterobacteriaceae (irradiated)	UFC/g			10	MUC.ENTBAT
<i>Enterococcus faecium</i>	UFC/g			10	MUC.ENT
<i>Enterococcus faecalis</i>	UFC/g			10	MUC.ENT
Yeasts	UFC/g			50	MUC.ML
Yeasts (irradiated)	UFC/g			10	MUC.ML
Molds	UFC/g			50	MUC.ML
Molds (irradiated)	UFC/g			10	MUC.ML
<i>Staphylococcus aureus</i>	UFC/g			10	MUC.STAPH
Salmonelle	Absent/25 g			Absent	MUC.SAL
Ash	%	7,0	6,0	8,0	MUC.CN
Crude fibre	%	6,0	4,30	7,70	MUC.CF
Crude fat	%	3,0	2,0	5,0	MUC.GR
Crude protein	%	18,50	16,20	20,81	MUC.PR
Moisture	%	12,0		13,0	MUC.UM
Vitamin A	U.I./kg	14400	11520	23040	MUC.Vit.A
Vitamin E	mg/kg	49,50	39,60	79,20	MUC.Vit.E
Copper	mg/kg	11,70	9,36	18,72	MUC.Cu

The Quality Control (CQ)

Fabio Bellacosa

The Technical Manager

Dr Elisabetta MUCEDOLA

Diète Standard

certificate

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Aut. M.I.C.A. n. MG 830-RA 252 bis del 13/01/1993
Aut. Min. San. n. 582/A del 25/07/1990
Dir. Gen. San. Reg. Lombardia
dT100001MI, dT100002MI, dT100003MI,
dT100004MI

Mangime completo per TOPI e RATTI Mantenimento a breve e medio termine

*Solo per animali da laboratorio non destinati all'alimentazione umana
Contiene farina di pesce non può essere somministrato ai ruminanti*

Istruzioni per l'uso: Somministrare asciutto a volontà a topi e ratti stabulati per ricerche a breve e medio termine, con acqua di bevanda sempre a disposizione.

Composizione: Frumento, granturco, farina di estrazione di soia tostata, semola glutinata di granturco, paglia di frumento, farina di pesce, farina di erba medica, fosfato bicalcico minerale, carbonato di calcio da rocce calciche macinate, cloruro di sodio, siero di latte in polvere, olio di soia, lieviti.

ADDITIVI (per kg)		Componenti analitici		%
Additivi nutrizionali		Umidità		12,00
E672	Vitamina A	U.I.	14400	18,50
E671	Vitamina D3	U.I.	1260	3,00
E1	Fe	mg	180	6,00
E5	Mn	mg	54	7,00
E6	Zn	mg	67,5	
E4	Cu	mg	11,7	
E2	I	mg	0,90	
3b302	Co	mg	0,63	
Additivi tecnologici		Ceneri grezze		
E562	Sepiolite	mg	880	

4RF21

Formato / Shape / Format
pellet 12 mm
Peso netto all'origine Net weight / Poids net à l'origine
kg 12.5
LOTTO / BATCH / LOT
3xyzt
Data di produzione Date of manufacture Date de fabrication
g.m.a.
Da cons.preferib.entro: SHELF LIFE: Best before: Date de durabilité minimale:
g.m.a.
La scadenza indicata presuppone la conservazione in luogo fresco e asciutto ETPF1610R12M_It.Ing.Fr.

Aliment Standard

4RF21 certificate

Aliment complet pour RATS et SOURIS Entretien à bref et moyen terme

Uniquement pour animaux de laboratoire pas destinés à l'alimentation humaine

Mode d'emploi: Administrer sec à volonté aux rats et souris en stabulation pour des recherches à bref et moyen terme, avec de l'eau de boisson toujours à disposition.

Composition: Blé, maïs, tourteau d'extraction de soja toasté, gluten feed de maïs, paille de blé, farine de poissons, farine de luzerne, phosphate bicalcique mineral, carbonate de calcium, chlorure de sodium, lactosérum en poudre, huile de soja, levures.

ADDITIFS (par kg)

Additifs nutritionnels		Constituants analytiques		%
E672	Vitamine A	U.I.	14400	12,00
E671	Vitamine D3	U.I.	1260	18,50
E1	Fe	mg	180	3,00
E5	Mn	mg	54	6,00
E6	Zn	mg	67,5	7,00
E4	Cu	mg	11,7	
E2	I	mg	0,90	
3b302	Co	mg	0,63	
Additifs technologiques		Cet aliment contient de la farine de poisson l'administration est interdite aux ruminants		
E562	Sépiolite	mg	880	

Poids net à l'origine, date de fabrication, format et la date de durabilité minimale sont indiqués sur l'autre côté

Stockage en emballage d'origine dans un endroit frais et sec

Standard Diet

4RF21 certificate

Complete feed for MICE and RATS Maintenance for short and middle period

Only for laboratory animals

Directions for use: Administer the dry product *ad libitum* to mice and rats housed for short and middle terms studies with drinking water always available.

Composition: Wheat, maize, soybean meal extracted toasted, corn gluten feed, wheat straw, fish meal, lucerne meal, mineral dicalcium phosphate, calcium carbonate, sodium chloride, whey powder, soybean oil, yeasts.

ADDITIVES (per kg)

Nutritional additives		Analytical constituents		%
E672	Vitamin A	I.U.	14400	12,00
E671	Vitamin D3	I.U.	1260	18,50
E1	Fe	mg	180	3,00
E5	Mn	mg	54	6,00
E6	Zn	mg	67,5	7,00
E4	Cu	mg	11,7	
E2	I	mg	0,90	
3b302	Co	mg	0,63	
Technological additives		Contains fish meal shall not be fed to ruminants		
E562	Sepiolite	mg	880	

Net weight, date of manufacture, shape, shelf-life are printed on the other side

Keep cool and dry

Certificate of Analysis n° 90 of February 14th, 2017

Update

Standard Diet 4RF21 certificate

 Complete feed for MICE and RATS
 Maintenance for Short and Middle Period

Shape: reground on Jan 11th, 2017

SHELF-LIFE: Best Before 9 months from DOM (Date of Manufacture)

BROMATHOLOGICAL ANALYSIS	Method of analysis	Control Batch 3223	Batch 322301
		Value %	Value %
Moisture	MUC.UM	9.76	9.15
Crude protein	MUC.PR	18.59	19.21
Crude fat	MUC.GR	3.31	-
Crude fibre	MUC.CF	5.82	5.13
Ash	MUC.CN	6.84	-



IT COMPLIES TO THE ORIGINAL



PESTICIDES ANALYSIS	Value [µg/kg]	Method of analysis	D.L.
Organochlorine			
Esaclorobenzene	ND	EPA - 8081 A	5 µg/kg
α-BHC	ND	EPA - 8081 A	5 µg/kg
β-BHC			
γ-BHC (Lindane)	ND	EPA - 8081 A	5 µg/kg
Keltane	ND	EPA - 8081 A	5 µg/kg
Eptaclor	ND	EPA - 8081 A	5 µg/kg
Eptacloroepoxide	ND	EPA - 8081 A	5 µg/kg
DDE	ND	EPA - 8081 A	5 µg/kg
DDD			
DDT			
Dieldrin	ND	EPA - 8081 A	5 µg/kg
Endrin	ND	EPA - 8081 A	5 µg/kg
Thiodan	ND	EPA - 8081 A	5 µg/kg
Organophosphorus			
Phosdrin	ND	EPA - 8141 A	10 µg/kg
Diazinon	ND	EPA - 8141 A	10 µg/kg
Disulfoton	ND	EPA - 8141 A	10 µg/kg
Phyrimiphosmetyl	ND	EPA - 8141 A	10 µg/kg
Ronnel	ND	EPA - 8141 A	10 µg/kg
Dimetoate	ND	EPA - 8141 A	10 µg/kg
Fenthion	ND	EPA - 8141 A	10 µg/kg
Metylparathion	ND	EPA - 8141 A	10 µg/kg
Malathion	ND	EPA - 8141 A	10 µg/kg
Fenitrothion	ND	EPA - 8141 A	10 µg/kg
Parathion	ND	EPA - 8141 A	10 µg/kg
Phosphamidon	ND	EPA - 8141 A	10 µg/kg
Methyathion	ND	EPA - 8141 A	10 µg/kg
Phenamiphos	ND	EPA - 8141 A	10 µg/kg
Ethion	ND	EPA - 8141 A	10 µg/kg
Diclorvos	ND	EPA - 8141 A	10 µg/kg
Clorphyriphosmetyl	ND	EPA - 8141 A	10 µg/kg
PCB	ND	EPA - 8082	20 µg/kg

 ND = not detectable
 D.L. = detection limit

MICROBIOLOGICAL ANALYSIS	Value CFU/g	Method of analysis
Total Viable Organism	7400	MUC.CBT
Total Coliforms	< 10	MUC.COL
Enterobacteriaceae	< 100	MUC.ENTBAT
Yeasts	< 50	MUC.ML
Molds	< 50	MUC.ML
Fecal Indicators		
Enterococcus faecium	< 10	MUC.ENT
Enterococcus faecalis	< 10	MUC.ENT
E. coli	< 10	MUC.E.coli
Pathogens		
Staphylococcus aureus	< 10	MUC.STAPH
Clostridium perfringens	< 10	MUC.PERF
Salmonelle	absent in 25 g	MUC.SAL

	Value	Method of analysis	D.L.
INHIBITING SUBSTANCES			
	absent	MUC.INIB.	-
MYCOTOXINES			
Total Aflatoxines (B1,B2 - G1,G2)	ND µg/kg	MUC.AFLA2	5 µg/kg
HEAVY METALS AND MINERALS			
Lead (Pb)	0.64 mg/kg	EPA - 7420	0.05 mg/kg
Cadmium (Cd)	0.066 mg/kg	EPA - 7130	0.05 mg/kg
Selenium (Se)	ND mg/kg	EPA - 7740	0.05 mg/kg
Arsenic (As)	ND mg/kg	EPA - 7060 A	0.05 mg/kg
Mercury (Hg)	ND mg/kg	EPA - 7471	0.05 mg/kg
OTHERS			
Nitrite (NaNO ₂)	5.36 mg/kg	Colorimetric method	0.5 mg/kg
Nitrate (NaNO ₃)	45.29 mg/kg	Ionic chromatography	5 mg/kg
Fluoride (F ⁻)	4.01 mg/kg	Potenziometria	0.25 mg/kg
Nitrosodiethylamine	ND µg/kg	GC-MS	1 µg/kg
Nitrosodimethylamine	ND µg/kg	GC-MS	1 µg/kg

 Comply with PF1610
 The Quality Control

Dr. Federico CARACCILO

 Approved
 The Technical Manager

Dr. Elisabetta MUCEDOLA


The original certificates of analysis and the samples are kept in our archives