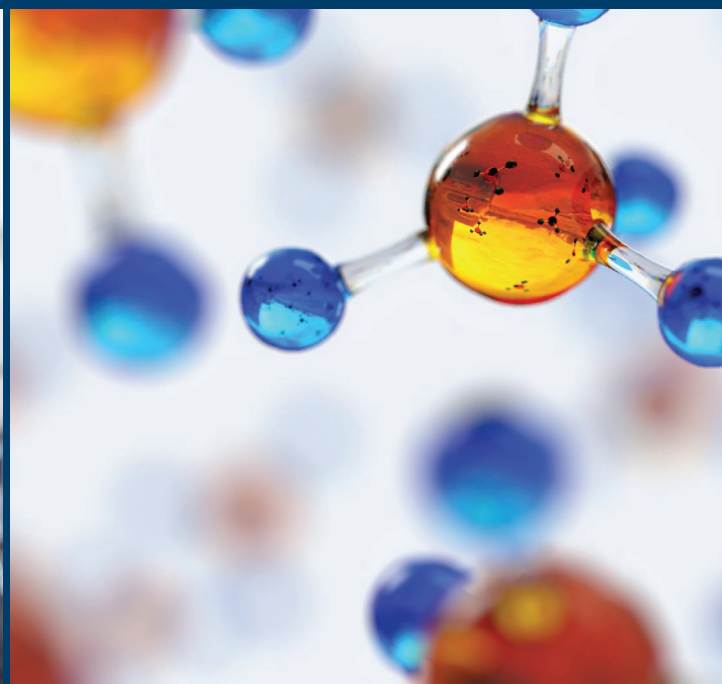


BARASTOC

RESEARCH FEEDS

Enabling excellence in research outcomes



Supplied by



RIDLEY – YOUR TRUSTED PARTNER FOR EXCELLENCE IN RESEARCH OUTCOMES

Since 1938 Barastoc feeds have been trusted to provide superior, complete and balanced diets to producers across Australia and across many species. Barastoc’s commitment to consistent product quality underpins this success. And just like our Barastoc feeds, quality is the cornerstone of Ridley and pivotal to our status as Australia’s leading provider of high performance animal nutrition solutions. We recognise the critical link that our products play in the feed to food supply chain. We take great care and pride in our people, our products and our premises. We are committed to maintaining and improving the quality and safety standards of all our products. To support this commitment, all of our manufacturing facilities operate an integrated Quality Management System (QMS) reflective of the industry recognised accreditations that they hold. Adherence to our industry leading QMS ensures robust quality assurance steps are in place to manage, monitor and confirm that the raw materials we use, our manufacturing processes and resulting products we produce meet our customer’s expectations.

Our Quality Management System comprises a number of key areas:

- OUR PEOPLE
- National Quality Team dedicated to maintaining a robust fit for purpose QMS
 - Quality is a core pillar of everyone's roles and responsibilities
 - Best practice whole of business training program supported by face to face competency based assessments
 - A commitment to quality innovation, empowering our people to contribute new ideas and find better ways of improving our standards

- OUR COMMITMENT
- To implement and adhere to best practice quality standards
 - HACCP and GMP principles are the foundation of our industry leading Quality Management System
 - Current certification to industry recognised food safety standards (FeedSafe®, HACCP, APVMA GMP)
 - Regular internal and third party audit program in order to maintain industry best practice and encourage continual improvement

- OUR RAW MATERIAL INTEGRITY
- Company-wide acceptance standards aligned with industry standards and customer expectations
 - Rigorous testing program to ensure consistent quality and safety of all raw materials
 - Participation in compliance schemes to ensure that all raw materials comply with all State and Federal laws relating to chemical and pesticide residues and specified government designated maximum residue levels
 - Approved supplier program to ensure the integrity of our customers’ supply chain with retention sample program for raw materials

- OUR FINISHED FEED INTEGRITY
- Our quality team measures feed performance against the following benchmarks;
- Leading technical expertise in NIR calibration and laboratory best practice with performance cross-referenced against approved third party laboratories
 - Monitoring system and robust testing of finished product quality in association with a retention sample program for all finished products
 - Issue management system for the control, monitoring and reporting of all non-conformances

- OUR FEED SAFETY AND TRACEABILITY
- National programs for biosecurity and feed recalls with mock exercises conducted to ensure capability of fast response times
 - Quality management and operational systems in place to take appropriate precautions and measures to minimise risk
 - Systems and records in place to identify every input and process from feed ingredient to finished product delivery
 - Segregated feed mills based on Restricted Animal Materials supported by driver declaration system of prior loads to protect feed safety

With these best practices in place, we can be confident that the safety, quality and integrity of our products is protected.

We are committed to delivering premium quality animal nutrition solutions.

What do Barastoc and Ridley provide the animal research industry?



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RIDLEY QUALITY



We are respected for the quality and performance of our feed rations, for our service and expertise, for our continual innovation and improvement, and for our commitment to delivering the best possible nutritional outcomes.

Ridley is Australia's leading provider of high performance animal nutrition solutions and has been integral to animal feed manufacturing industry for over 30 years, building strong partnerships with suppliers, customers and local communities.

We are respected for the quality and performance of our feed rations, for our service and expertise, for our continual innovation and improvement, and for our commitment to delivering the best possible nutritional outcomes.

Ridley operates within the specialist, retail space and commercial sector; with a highly-skilled team of industry-recognised nutritionists, we are able to deliver customised feed solutions for research and laboratory customers.

Our team offers a diverse range of skillsets, with many nutritionists having worked across multiple species and we also provide expertise in specialist categories.

Ridley has a reputation for quality feeds that deliver results. We work alongside leading research institutions, such as CSIRO, to deliver innovative feed solutions.

All Ridley feed mills hold accreditation in HACCP and FeedSafe. External accreditation audits for both standards is held annually. HACCP (Hazard Analysis – Critical Control Points) is an internationally recognised Food (Feed) Safety Standard that risk assesses the entire production process to determine the critical points of the process that can affect the safety (and quality) of the finished product, and puts controls in place to minimise these risks.

Every Ridley site has a detailed internal audit completed at least once per year conducted by a qualified lead auditor. These audits are seen as best practice across numerous industries (Including feed manufacture). These audits cover all standards for which the site is accredited, as well as internal Ridley standards which well exceed accreditation requirements.

Every product manufactured is tested for fat, protein and moisture on the site NIR (Near Infra-Red) spectrometer, to ensure we are meeting the nutritional specification of our feed. Calibrations for these are updated frequently. Every batch is also tested for durability and fines content, to ensure the best quality product is sent to our customers. Each site has a testing schedule for feeds to be sent to external NATA accredited laboratories for testing that can't be done on site such as calcium, magnesium and phosphorus. Our nutritionists are frequently reviewing our laboratory results in conjunction with our customers to ensure our products are continually meeting their stringent specifications.

Other measures in place to ensure we only send safe, quality feed to our customers are;

- **Mock recalls** – conducted at least annually, and can be conducted by request from customers
- **Mixer CV (efficiency of our mixers)** – is conducted at least twice annually (industry requirement is once per year)
- **Cross transference** – conducted at least twice annually to ensure we have no carry over between batches of Cross transference testing feed produced
- **Feed Safety Testing**
On a monthly basis, we:
 - Conduct environmental swabbing of 12 locations around the mill
 - Microbiological testing of raw materials and finished goods
 - Medication residue testing on finished goods



FEEDSAFE® ACCREDITATION

The Stock Feed Manufacturer's Council of Australia (SMFCA) operates FeedSafe® as the quality assurance accreditation program for the Australian animal feed industry. All full (active manufacturer) members of SFMCA are required to comply with FeedSafe® to retain their association membership. The central aspect of FeedSafe® is a Code of Good Manufacturing Practice (GMP), which has been developed in conjunction with the Chief Veterinary Officers within each state, and the final document has Primary Industries Ministerial Council endorsement.

FeedSafe® requires feed manufacturers to meet minimum standards in relation to:

- Premises and mill buildings
- Personnel training and qualifications
- Plant and equipment
- Raw material sourcing and purchasing
- Raw material quality and storage
- Feed formulation and manufacturing
- Product labelling
- Loading, transport and delivery to clients
- Product inspection, sampling and testing
- Customer complaint investigation

FeedSafe® is a program aimed at increasing the commitment to quality assurance and risk mitigation in the manufacture and use of animal feeds. To obtain FeedSafe® accreditation, feed manufacturers are required to undergo annual site audits, these being conducted by independent third party food safety auditors.



Ridley's highly skilled Nutrition and Technical team working side by side to enable excellence in research outcomes.

INNOVATIVE SOLUTIONS

Our innovation program aims to deliver on our mission of providing our customers with sustainable improvements in performance over cost through new feeds and feeding practices.

We support a vast range of research and development programs at the forefront of animal nutrition science.

We have strong partnerships with industry and regulated bodies, universities, and key research organisations, including the CSIRO. Projects range from animal nutrition and productivity, novel ingredients, and environmental management, to technology development and commercialisation.

These research programs inform everything we do, from upgrades to our manufacturing facilities, to feeds that provide greater quality and consistency.

NUTRITIONAL EXPERTISE

Ridley has one of the largest, most experienced nutritional and technical teams in the Australian animal nutrition industry. The team is highly regarded and regularly collaborates with animal nutrition knowledge leaders around the world.

Our team regularly conducts reviews of raw materials and processes. This process of continuous improvement ensures optimal animal health and performance, whilst providing our customers with the knowledge that they are providing consistent quality.

Irrespective of whether our customers are seeking complete feed rations, mineral concentrates, nutritional blocks, or supplements, our team will provide product and nutritional advice.

At Ridley, we make sure that every product that leaves our manufacturing sites is backed by the best available nutritional expertise.

Research Diet Integrity & Recording

Access & Recall of customised diets from a previous research trial/published paper?

If permission is granted by the owner/researcher and the diet is adequately referenced by product code, date of manufacture and receiving facility, we do maintain comprehensive records on diet formulation that can be replicated for continued research efforts.

Diet Formulation

All of our research feeds have a fixed formulation, ensuring consistency batch to batch. This is our unique way to limit some of the confounding variables; we understand that diet can have a profound impact on the research being conducted.

MICE MAINTENANCE CUBE

IRRADIATED 10KG

A complete and balanced diet containing natural ingredients specifically formulated to provide the nutrients essential for growth and maintenance. The diet is formulated to meet the nutritional requirements for rodents established by the National Research Council (1995).

WHAT WILL IT PROVIDE MY LABORATORY MICE?

Uniform nutrition through a fixed formulation to limit variation in the diet. The use of a fixed formula diet guarantees batch to batch consistency to provide confidence in research outcomes.

High quality pelleted product, specifically formulated to provide the nutrients required for growth, maintenance and reproduction.

Industry recognised certified quality systems ensure a safe and regulated product.



MICE MAINTENANCE CUBE

IRRADIATED 10KG

PRODUCT INFORMATION

Barastoc Irradiated Mice Cubes – has been used in many biomedical research facilities within Australia for over 43 years.

- Cubed Product; 12mm in diameter and an average length of 20mm
- Formulated for growth and maintenance
- 10kg net weight of product
- Product is gamma irradiated at a rate of 25 kilogray
- Packaged in a double walled paper bag which is vacuum packed and heat sealed in a 150 micron plastic bag. To ensure product integrity this sealed package is then placed in a single walled paper bag before being packed into a cardboard carton for shipping.



INGREDIENTS

Cereal Grains (Wheat and Dehulled Oats), Animal (Meat and Bone Meal, Fishmeal) and Vegetable Protein Meals (Soybean), Skim Milk Power, Cereal by Products (Wheat Origin), Molasses, Salt, Vegetable Oil (Canola Origin), Amino Acids, Vitamins and Trace Minerals.

TYPICAL ANALYSIS

Min Crude Protein	20%	Vitamin A	15 IU/g
Min Crude Fat	6%	Vitamin D ₃	2 IU/g
Max Crude Fibre	3.2%	Vitamin E	273 mg/kg
ADF ^A	4.4%	Vitamin K ₃	55 mg/kg
NDF ^B	11.2%	Vitamin B ₁	70 mg/kg
DE	12.8 MJ/kg	Vitamin B ₂	52 mg/kg
Calcium	0.9%	Vitamin B ₆	33 mg/kg
Phosphorus	0.94%	Vitamin B ₁₂	0.08 mg/kg
Sodium	0.35%	Niacin	442 mg/kg
Potassium	0.82%	Panto	236 mg/kg
Chlorine	0.58%	Biotin	1.67 mg/kg
Magnesium	0.25%	Folic	11.64 mg/kg
Lysine	1.11%	Iron	164 mg/kg
Methionine	0.37%	Zinc	103 mg/kg
Linoleic Acid	1.52%	Manganese	160 mg/kg
Starch	29%	Copper	19 mg/kg
Selenium	0.35 mg/kg	Molybdenum	1.16 mg/kg
Cobalt	0.67 mg/kg	Iodine	1.67 mg/kg

^A Acid Detergent Fibre ^B Neutral Detergent Fibre



BARASTOC

RESEARCH FEEDS

MICE BREEDER CUBE

IRRADIATED 10KG

A complete and balanced diet containing natural ingredients specifically formulated to provide the nutrients essential for growth, maintenance and reproduction. The diet is formulated to meet the nutritional requirements for rodents established by the National Research Council (1995).

WHAT WILL IT PROVIDE MY LABORATORY MICE?

Uniform nutrition through a fixed formulation to limit variation in the diet. The use of a fixed formula diet guarantees batch to batch consistency to provide confidence in research outcomes.

High quality pelleted product, specifically formulated to provide the nutrients required for growth, maintenance and reproduction.

Industry recognised certified quality systems ensure a safe and regulated product.

BARASTOC

RESEARCH FEEDS

MICE BREEDER CUBE

IRRADIATED 10KG

PRODUCT INFORMATION

Barastoc Irradiated Mice Cubes – breeding and maintenance diet has been used in many biomedical research facilities within Australia for over 43 years.

- Cubed Product; 12mm in diameter and an average length of 20mm
- High levels of fat to support optimum reproductive performance
- 10kg net weight of product
- Product is gamma irradiated at a rate of 25 kilogray
- Packaged in a double walled paper bag which is vacuum packed and heat sealed in a 150 micron plastic bag. To ensure product integrity this sealed package is then placed in a single walled paper bag before being packed into a cardboard carton for shipping.



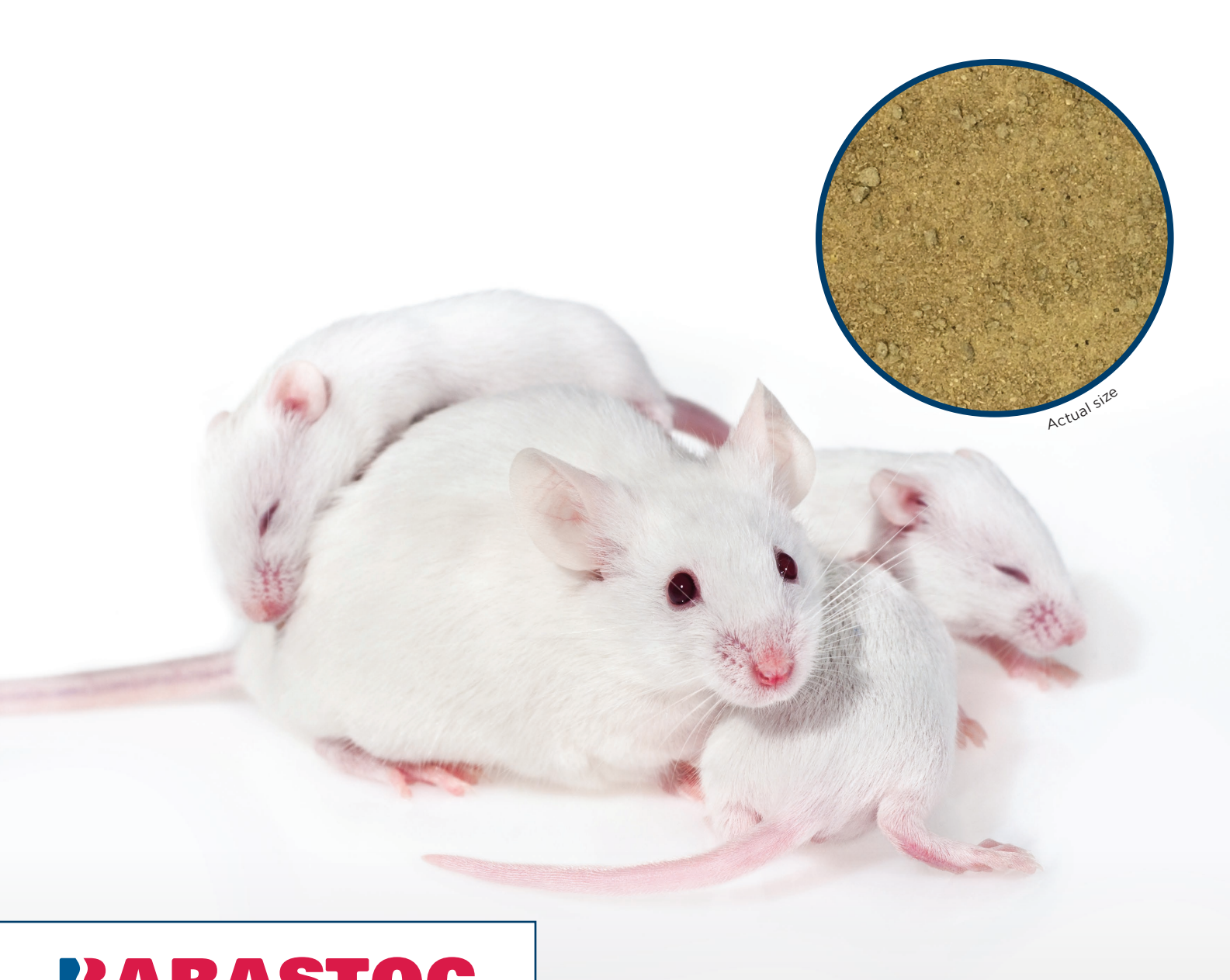
INGREDIENTS

Cereal Grains (Wheat and Dehulled Oats), Animal (Meat and Bone Meal, Fishmeal) and Vegetable Protein Meals (Soybean), Skim Milk Power, Cereal by Products (Wheat Origin), Molasses, Salt, Vegetable Oil (Canola Origin), Amino Acids, Vitamins and Trace Minerals.

TYPICAL ANALYSIS

Min Crude Protein	20%	Vitamin A	15 IU/g
Min Crude Fat	8.5%	Vitamin D ₃	2 IU/g
Min Crude Fibre	3.2%	Vitamin E	270 mg/kg
ADF ^A	4.4%	Vitamin K ₃	59 mg/kg
NDF ^B	10.4%	Vitamin B ₁	69 mg/kg
DE	13.2 MJ/kg	Vitamin B ₂	52 mg/kg
Calcium	1.1%	Vitamin B ₆	34 mg/kg
Phosphorus	0.96%	Vitamin B ₁₂	0.08 mg/kg
Sodium	0.35%	Niacin	437 mg/kg
Potassium	0.89%	Panto	235 mg/kg
Chlorine	0.57%	Biotin	1.68 mg/kg
Magnesium	0.25%	Folic	11.82 mg/kg
Lysine	1.22%	Iron	180 mg/kg
Methionine	0.38%	Zinc	103 mg/kg
Linoleic Acid	3.11%	Manganese	156 mg/kg
Starch	25%	Copper	20 mg/kg
Selenium	0.33 mg/kg	Molybdenum	1.19 mg/kg
Cobalt	0.67 mg/kg	Iodine	1.67 mg/kg

^A Acid Detergent Fibre ^B Neutral Detergent Fibre



BARASTOC

RESEARCH FEEDS

MICE BREEDER MASH

IRRADIATED 10KG

A complete and balanced diet containing natural ingredients specifically formulated to provide the nutrients essential for growth, maintenance and reproduction. The diet is formulated to meet the nutritional requirements for rodents established by the National Research Council (1995).

WHAT WILL IT PROVIDE MY LABORATORY MICE?

Uniform nutrition through a fixed formulation to limit variation in the diet. The use of a fixed formula diet guarantees batch to batch consistency to provide confidence in research outcomes.

High quality pelleted product, specifically formulated to provide the nutrients required for growth, maintenance and reproduction.

Industry recognised certified quality systems ensure a safe and regulated product.

BARASTOC

RESEARCH FEEDS

MICE BREEDER MASH

IRRADIATED 10KG

PRODUCT INFORMATION

Barastoc Irradiated Mice Cubes – breeding and maintenance diet has been used in many biomedical research facilities within Australia for over 43 years.

- Mash Product; variable particle size which facilitates addition of test substances
- High levels of fat to support optimum reproductive performance
- 10kg net weight of product
- Product is gamma irradiated at a rate of 25 kilogray
- Packaged in a double walled paper bag which is vacuum packed and heat sealed in a 150 micron plastic bag. To ensure product integrity this sealed package is then placed in a single walled paper bag before being packed into a cardboard carton for shipping.

INGREDIENTS

Cereal Grains (Wheat and Dehulled Oats), Animal (Meat and Bone Meal, Fishmeal) and Vegetable Protein Meals (Soybean), Skim Milk Power, Cereal by Products (Wheat Origin), Molasses, Salt, Vegetable Oil (Canola Origin), Amino Acids, Vitamins and Trace Minerals.

TYPICAL ANALYSIS

Min Crude Protein	20%	Vitamin A	15 IU/g
Min Crude Fat	8.5%	Vitamin D ₃	2 IU/g
Min Crude Fibre	3.2%	Vitamin E	270 mg/kg
ADF ^A	4.4%	Vitamin K ₃	59 mg/kg
NDF ^B	10.4%	Vitamin B ₁	69 mg/kg
DE	13.2 MJ/kg	Vitamin B ₂	52 mg/kg
Calcium	1.1%	Vitamin B ₆	34 mg/kg
Phosphorus	0.96%	Vitamin B ₁₂	0.08 mg/kg
Sodium	0.35%	Niacin	437 mg/kg
Potassium	0.89%	Panto	235 mg/kg
Chlorine	0.57%	Biotin	1.68 mg/kg
Magnesium	0.25%	Folic	11.82 mg/kg
Lysine	1.22%	Iron	180 mg/kg
Methionine	0.38%	Zinc	103 mg/kg
Linoleic Acid	3.11%	Manganese	156 mg/kg
Starch	25%	Copper	20 mg/kg
Selenium	0.33 mg/kg	Molybdenum	1.19 mg/kg
Cobalt	0.67 mg/kg	Iodine	1.67 mg/kg

^A Acid Detergent Fibre ^B Neutral Detergent Fibre

GR2 RAT & MOUSE MAINTENANCE CUBE

IRRADIATED 10KG

A complete and balanced diet containing natural ingredients specifically formulated to provide the nutrients essential for growth and maintenance. The diet is formulated to meet the nutritional requirements for rodents established by the National Research Council (1995).

WHAT WILL IT PROVIDE MY LABORATORY RATS & MICE?

Uniform nutrition through a fixed formulation to limit variation in the diet. The use of a fixed formula diet guarantees batch to batch consistency to provide confidence in research outcomes.

High quality pelleted product, specifically formulated to provide the nutrients required for growth, maintenance and reproduction.

Industry recognised certified quality systems ensure a safe and regulated product.



GR2 RAT & MOUSE MAINTENANCE CUBE

IRRADIATED 10KG

PRODUCT INFORMATION

Barastoc Irradiated Mice Cubes – has been used in many biomedical research facilities within Australia for over 43 years.

- Cubed Product; 12mm in diameter and an average length of 20mm
- Formulated for maintenance
- 10kg net weight of product
- Product is gamma irradiated at a rate of 25 kilogray
- Packaged in a double walled paper bag which is vacuum packed and heat sealed in a 150 micron plastic bag. To ensure product integrity this sealed package is then placed in a single walled paper bag before being packed into a cardboard carton for shipping.



INGREDIENTS

Cereal Grains (Wheat and Dehulled Oats), Animal (Meat and Bone Meal, Fishmeal) and Vegetable Protein Meals (Soybean), Skim Milk Power, Cereal by Products (Wheat Origin), Molasses, Salt, Vegetable Oil (Canola Origin), Amino Acids, Vitamins and Trace Minerals.

TYPICAL ANALYSIS

Min Crude Protein	20%	Vitamin A	15 IU/g
Min Crude Fat	3%	Vitamin D ₃	2 IU/g
Max Crude Fibre	3.2%	Vitamin E	260 mg/kg
DE	13.5 MJ/kg	Vitamin K ₃	55 mg/kg
Calcium	0.9%	Vitamin B ₁	64 mg/kg
Available Phosphorus	0.3%	Vitamin B ₂	48 mg/kg
Sodium	0.25%	Vitamin B ₆	30 mg/kg
Potassium	0.76%	Vitamin B ₁₂	0.08 mg/kg
Chlorine	0.47%	Niacin	400 mg/kg
Magnesium	0.17%	Panto	220 mg/kg
Lysine	1.15%	Biotin	1.48 mg/kg
Methionine	0.4%	Folic	11 mg/kg
Linoleic Acid	0.98%	Iron	51 mg/kg
Starch	35%	Zinc	60 mg/kg
Selenium	0.1 mg/kg	Manganese	120 mg/kg
Cobalt	0.6 mg/kg	Copper	10 mg/kg
		Molybdenum	0.4 mg/kg
		Iodine	1.4 mg/kg

IRRADIATED FEED PROCESSING

What are the benefits?



Highly reputable process.



Trusted and used worldwide.



Total penetration capability even with products that have multiple packaging.



Seals are not stressed so packaging remains intact.



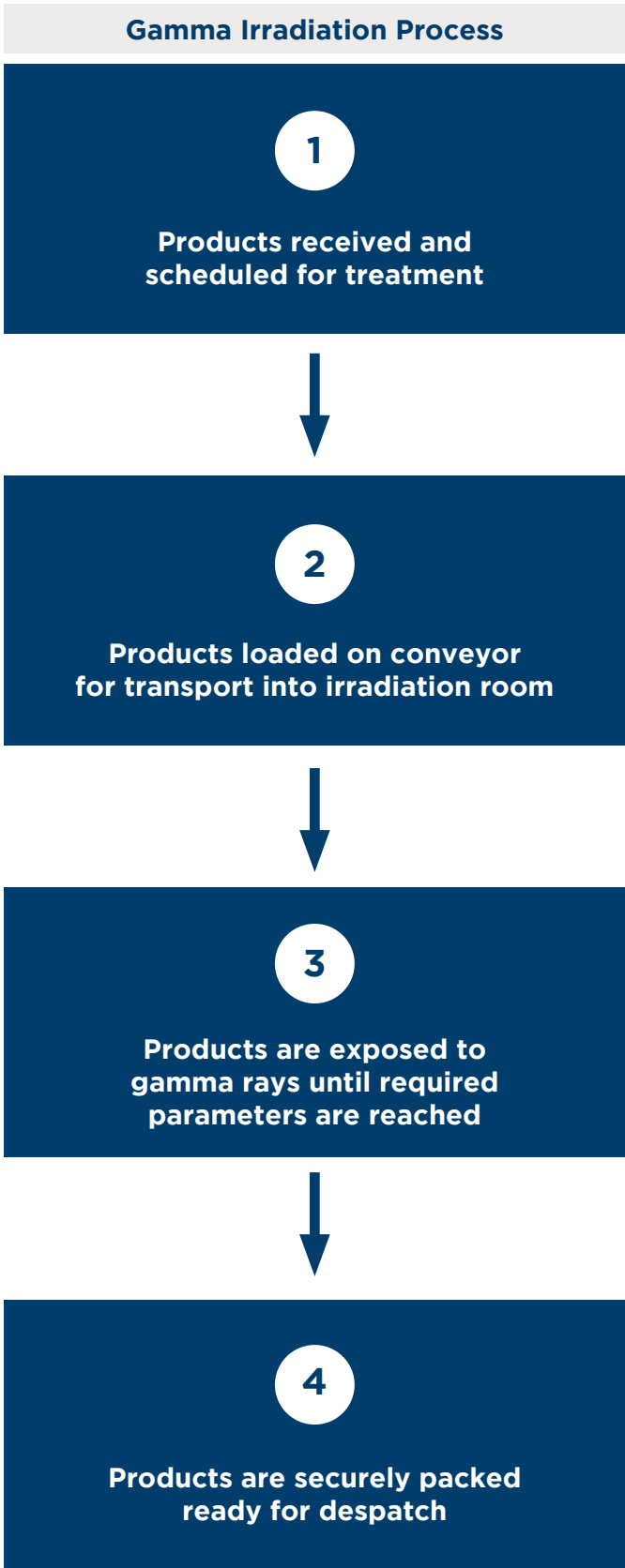
Reliable, consistent results.



Services broad product applications.



Safe and environmentally friendly.



LARGE TRIAL, CUSTOMISED SOLUTIONS

Ridley welcomes the opportunity to work with you to create customised feed solutions suited to your research requirements. Customised feed solutions are developed when working in close partnership with the Ridley Nutrition team. We encourage a collaborative approach whereby we will work with you to understand your research aims, hypotheses, trial duration, weekly feed requirements and the animal genetics. Your Account Manager will work with you on your supply agreement to ensure that your customised feed solution is readily available when and where you need it.

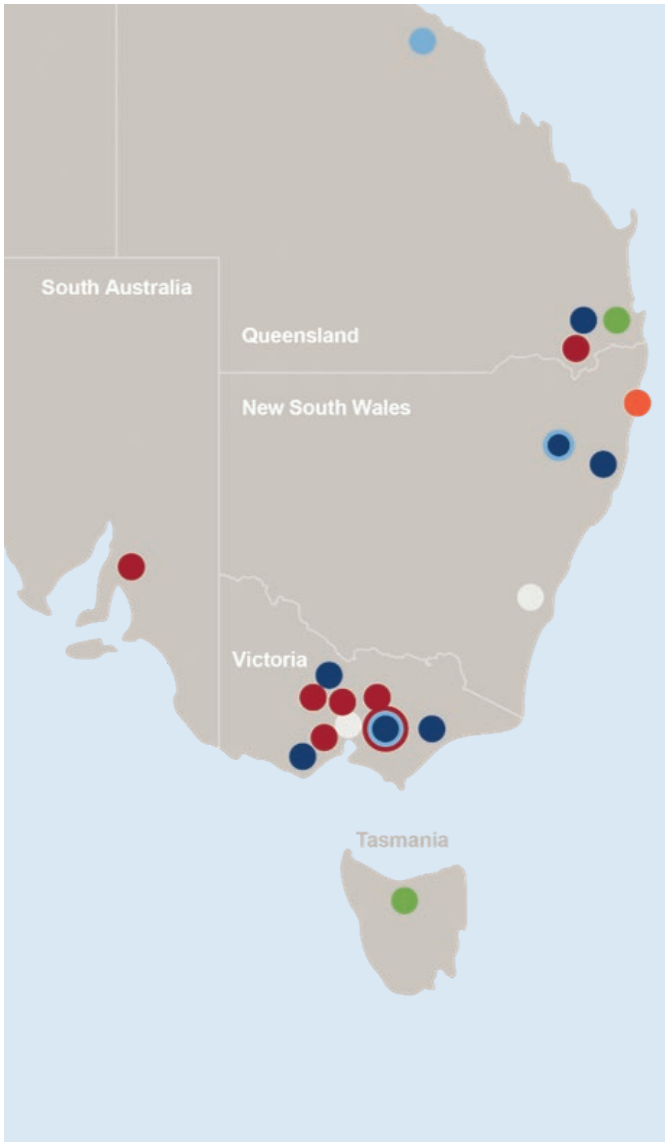
Please note that customised diets are subject to minimum volume requirements. All customer and research information is treated in the strictest confidence.

How much will the ration cost?

Ration costs are variable. Commodities such as raw materials and feed additives, as well as requested production volumes, customisation or packaging requirements will influence end cost. A quote can be provided by contacting our Field Consultant, or Ordering & Sales personnel. Support Team contact details on the back page.

SUPPLY CHAIN SECURITY

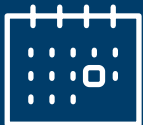
Ridley has a diverse manufacturing footprint within Australia with sites across regional areas, the Eastern Seaboard and Tasmania. The scale of our operations and proven manufacturing performance confidently provides a safeguard to you and your research endeavors. When considering our supply chain security and robust logistics, we have the capacity to draw from a wide resource pool to ensure consistency and continuity of supply. We understand that trials can be conducted over extended periods and the outcome your research can potentially be of enormous significance to a sector or community.



ORDERING PROCESS



Place your order via email to **orders@ridley.com.au**
Please advise any special instructions on your order.



All orders received by Thursday each week will be booked for production the following week.
N.B. If your diet does not require irradiation, please make this clear on your purchase order.



Following production and irradiation of your order, delivery to your specified address will be made between Mondays and Thursdays.

Your dedicated Ridley Team

For further information or to order, contact your Ridley representative:

Key Account Manager – Tania McKee

Phone: 0429 092 183

Email: tania.mckee@ridley.com.au

Orders & Sales

Phone: 1300 666 657

Email: orders@ridley.com.au

Production Site / Audits

Email: StArnaud.sales@ridley.com.au

Ridley Corporate Quality Team

Ridley Nutrition Team

www.ridley.com.au



LEADING ANIMAL NUTRITION