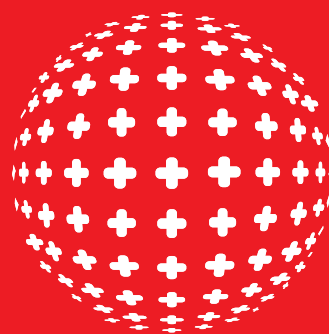


zoolife[®]

www.zoolife.com



specialist marine products

november 06

Zoolife® is an International corporation founded by zoo and wildlife vets, providing services in disciplines applicable to zoos, aquaria, wildlife, field projects and architectural practices worldwide. Conservation, education and research are fundamental values in our activities.

Zoolife is consulted in leading research and development programs internationally, working with specialist institutions, NGOs, government bodies, universities and field research projects.

Our dynamic pharmaceutical and product development knowledge and programs has resulted in the provision of significant advances in nutrition and welfare. Our results have important benefits in animal health, preventive medicine, living exhibit presentation and conservation. A number of our pharmaceutical, nutritional and healthcare products are used and recommended internationally.

Our services are accessed by a wide spectrum of clients, ranging from multinational companies to charitable trusts, and private collections. Providing exceptional results and outstanding care with an understanding of our clients' aims and resources is achieved by dedicated professionals highly respected in their field.

We have assisted a number of zoos, aquaria, wildlife organizations and companies to improve operational efficiency and develop strategies and regimes for improving collection management.

To find out how Zoolife International can assist you in reaching your objectives, or to request further information on any aspect of our activities, please contact us and visit our website at www.zoolife.com

Zoolife® – bringing science to life

contacts



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- **Veterinary consultancy • Nutritional consultancy • Research and Development**
- **Zoolab® laboratory services • Nutritional, environmental and healthcare products**





zoolife®

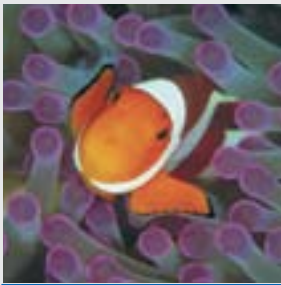
Animal Health and Nutrition

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Email: info@zoolife.com



fishvits® color marine®

Unique patented antioxidant food enrichment system

Contains natural algal extracts UK Patent GB 2392815. International Patents pending

Fishvits® Color Marine®

(patented color technology)

Fishvits Color Marine is a patented technology, research formulated to provide optimal health and important natural carotenoid (color) pigments and antioxidants.

Used extensively by leading public aquaria and zoos worldwide – now available for serious fish breeders and hobbyists.

Ultimate Nutrition:
for all marine fish and invertebrates.

Vibrant reef colors:
restores and maintains natural vivid reef and ocean colors.

Designed to enrich and protect food:
ideal for frozen food, gamma irradiated food, live feeds, dry and moist foods, algae including nori.

Preventive medicine and therapy:
Fishvits Color Marine can be added to water in quarantine and medical management applications.

Assists in the protection of fish and invertebrates:
Vitamins, minerals and antioxidants are known to assist in the reduction of tissue damage, stress and disease.

See the difference rapidly:
optimal nutrition and health and amazing true color.

Assists water quality:
Fishvits Color Marine is designed to enhance protein skimmer activity after feeding.

Maintenance and Medical Management

Optimal health and natural color enhancement for all marine fish and invertebrates.

Improves artemia (brine shrimp), krill, mysis, plankton, lance fish, mussel, prawn, cockle, live feeds, algae including nori, freeze dried and dried foods.

Medical applications
please visit our website or contact our veterinary department



Fishvits Veterinary, a hi potency vitamin, mineral and antioxidant nutritional supplement suitable for freshwater and marine fish, will be available from May 2008

Designed to enrich:

★ Simply apply to frozen food, gamma irradiated food, live feeds, dry and moist foods, algae including nori.

★ Ideal for mysis, plankton, krill, artemia, cockle, shrimp and fish.

★ Protects food during defrosting and storage.

FISHVITS® Color Marine®

Description		
Fishvits® Color Marine®	50ml	Disc top / Spray
Fishvits® Color Marine®	100ml	Disc top / Spray
Fishvits® Color Marine®	250ml	Disc top
Fishvits® Color Marine®	1 L	Pro pack
Fishvits® Color Marine®	2.5 L	Pro pack



fishvits®

tablets and powder formula

Fishvits® tablets

- Shark and Ray tablets
- Teleost tablets

Fishvits Tablets are a research formulated dietary supplement for captive sharks, rays and teleost fish, containing a wide range of vitamins, minerals, carotenoids and micronutrients to help enhance health, growth, color, immunity and reproductive status.

The formulation helps overcome the limitations of captive diets, replacing nutrients damaged or lost by food storage and processing and by providing many nutritional elements and micronutrients important for optimal health.

Fishvits tablets are used and recommended by many leading aquaria and hobbyists worldwide.

Designed for regular use by simple addition to the diet.

Fishvits® powder

Fishvits Powder is an excellent method of enriching prepared feeds as may be used in feed manufacture. Please contact us for specifications and further details on specific applications.



**vitamins, minerals,
micronutrients
and carotenoids**

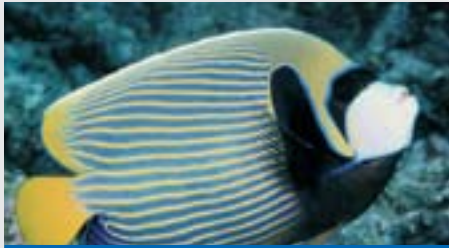


Routine Use:

1 tablet administered 3 times per week given in feed (number of tablets dependant on pack tablet weight)

High use rate

where higher levels of nutritional supplementation are required, such as during periods of stress or disease or pre and post transportation, the dose may be increased (see pack or website at www.zoolife.org for further details)



colorfin® reef color®

Unique patented color food enrichment system

Contains natural algal extracts UK Patent GB 2392815. International Patents pending

Colorfin® reef color®

(patented color technology)

Colorfin is a totally new patented technology, research formulated to provide important natural carotenoid (color) pigments and antioxidants.

Used extensively by leading public aquaria and zoos worldwide – now available for serious fish breeders and hobbyists.

Vibrant reef colors:

restores and maintains natural vivid reef and ocean colors.

Enhanced Nutrition:

for all marine fish and invertebrates.

Designed to enrich and protect food:

ideal for frozen food, gamma irradiated food, live feeds, dry and moist foods, algae including nori.

Protects fish and invertebrates:

reducing tissue damage, stress and disease.

See the difference rapidly:

enhanced health and protection, amazing true color.

Assists water quality:

Colorfin is designed to enhance protein skimmer activity after feeding.



Designed to enrich:

★ Simply apply to frozen food, gamma irradiated food, live feeds, dry and moist foods, algae including nori.

★ Ideal for mysis, plankton, krill, artemia, cockle, shrimp and fish.

★ Protects food during defrosting and storage.

Maintenance

Color enhancement for all marine fish and invertebrates.

Improves artemia (brine shrimp), krill, mysis, plankton, lance fish, mussel, prawn, cockle, live feeds, algae including nori, freeze dried and dried foods.





zoolife®

Animal Health and Nutrition

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See the difference:

- optimal health, growth and true colors.

Recommended:

- and used by leading public aquaria, zoos and vets worldwide

reef gel® daily use diet (patented natural technology)

Veterinary formulated:

- for excellent growth, color, body conformation and condition in marine fish and invertebrates

Designed for:

- for easy regular daily use

Optimal nutrition:

- highly palatable natural formulation
- extends periods of food availability, essential for correct nutrition
- creates feeding stations, reducing stress, aggression and competitive behavior
- contains organic marine algae, enriched zooplankton, crustaceans and copepod lipids, immunomodulators, carotenoid (color) pigments, antioxidants, multiple essential vitamins, minerals, and vital organic trace elements
- optimal nutrient and energy density; no added phosphates or nitrates
- unique cold set instant formula protects vital nutrients

reef gel® veterinary diet (patented natural technology)

Veterinary formulated:

- for optimal health, immunity and nutritional support in marine fish and invertebrates

Optimal protection:

- Contains IMUFIN® to assist immunity
- Helps reduce stress and disease
- Unique cold set instant formula protects vital nutrients & medication
- Ideal for drug administration for prophylaxis, treatment and vaccination

Ultimate nutrition:

- highly palatable natural formulation
- extends periods of food availability, essential for correct nutrition
- creates feeding stations, reducing stress, aggression and competitive behaviour
- contains organic marine algae, enriched zooplankton, crustaceans and copepod lipids, immunomodulators, carotenoid (color) pigments, antioxidants, multiple essential vitamins, minerals, and vital organic trace elements
- optimal nutrient and energy density; no added phosphates or nitrates

USE: daily and veterinary formula:

- Gradually add wet feeds and/or water to Reef Gel mixing to form a moist crumb
- Feed Options:
 - feed as a fine moist crumb for small species
 - gently squeeze between fingertips to form thin gel flakes
 - squeeze by hand into a ball or block and slice to the desired feed size
 - press hand formed gel blocks into corals or rockwork
 - press gel balls or blocks onto hanging feeders, suspending within displays

reef gel®

Unique patented cold set gel food system

UK Patent GB 2395414. International Patents pending

reef gel® daily use diet



reef gel® veterinary diet



calanus™

marine plankton

Zoolife® Calanus™ Plankton

Zoolife is a global distributor of Calanus™ plankton products.

Calanus copepods are widely distributed in major oceanic areas. Calanus is a major component in the diet of many marine animals, having an important role in the maintenance of ecosystems. Millions of tons are present in the world oceans.

Using patents pending technology, Calanus is carefully harvested to preserve the integrity and condition of the copepod.

Calanus has a balanced nutritional composition of unsaturated fatty acids, amino acids, carotenoids including astaxanthin, vitamins, minerals, essential trace elements and antioxidants.

Calanus contains large quantities of wax esters which are a vital nutritional component in the diet of many fish and invertebrates.

Calanus lives in marine waters at the base of the food web, making it virtually free of pollutants. Calanus contains significant quantities of natural astaxanthin and a number of additional carotenoids.

All of these features make Calanus and its product derivatives a very valuable nutritional resource.

Frozen

Of extremely high quality, Zoolife frozen Calanus is of great value in the captive reproduction and maintenance of many species of fish and invertebrates.

It is suitable for a wide range of species and is ideal in particle size to fit between artemia and mysid. This assists the captive rearing of many species including the Syngnathidae.

Freeze Dried

High quality freeze dried natural plankton providing a convenient floating feed for many species of fish. Whilst applications in some systems are limited by surface skimming, this product is highly palatable and rapidly consumed making surface feeding possible in many situations. This offers a convenient feeding method.

Powder

Zoolife Calanus Powder is a very valuable feed for invertebrates including corals and anemones, juvenile fish, and for incorporation into diets including gel feeds.

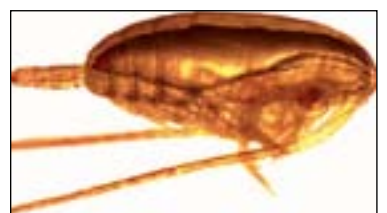
This feeding method offers a convenient, cost effective and balanced source of key nutrients for many species.

Calanus Oil

Pure extracted lipids from Calanus marine copepods.

High in wax esters and carotenoids including astaxanthin, vital trace elements, vitamins, minerals and natural antioxidants.

A very valuable resource for dietary supplementation. May be used to increase the lipid content and energy density of feeds.





natural algae

◆ Certified Organic ◆ laboratory quality assured

Zoolife Natural Organic Algae - perfect natural feeds

Zoolife supply a wide range of highest quality natural algae in both bulk zoo, aquarian and trade formats.

A range of packaging options is available to suit order requirements.

Macroalgae are available in sizes from whole blade, large and small flakes, particulate and micronised forms.

Zoolife® Organic Nori

Nori Small and Medium Flakes, and Whole Blade are highly nutritious hand harvested algal of Porphyra.

Highly palatable, Nori Flakes and Whole Blade are a valuable feed for many species of herbivorous and omnivorous marine fish and invertebrates.

Nori Flakes and Whole Blade are an excellent source of organic minerals and contain natural vitamins and pigments important for fish and invertebrate health.

After hand harvesting, Nori Flakes and Whole Blade are prepared by gently drying the whole blade prior to cutting to size. No chemicals, freeze drying or further processing takes place, ensuring that the feed is kept in perfect natural condition.

The quality of Nori Flakes and Whole Blade is ensured by laboratory testing and certification prior to release. All batches are tested for bacterial counts and heavy metal content. Only batches passed as fit for human consumption are used. This ensures optimal feed quality and maximum health benefits are always achieved.

Spirulina

High quality natural spirulina available for bulk or trade supply.

Stock Algae

Zoolife stock a wide range of additional algae including dulse and ascophyllum, fucus and ulva.





imufin®

soluble solution and oral powder

Unique patented immune stimulant system

UK Patent GB 2394659. International Patents pending *

Imufin®

IMMUNE STIMULANTS

for aquarium and ornamental fish
and invertebrates

Imufin® (* patented technology)
is veterinary formulated for the
enhancement of immunity and condition
in aquarium fish and invertebrates.

Routine Preventive Medicine and Therapy

- **Imufin® Soluble Solution** is highly valuable at times of purchase, shipping, quarantine, stress and prior to vaccination.
- It is also beneficial in periods of disease exposure and in medical treatment regimes.

Imufin Solution has been shown to improve skin, fin and mucous condition. Higher levels of immunity can help to protect against disease and infections. The use of Imufin Solution in the management of diseases including protozoan infections, bacterial infections and skin and fin wounds has been shown to be beneficial.

Imufin Solution is recommended by many leading aquaria, vets and hobbyists worldwide.

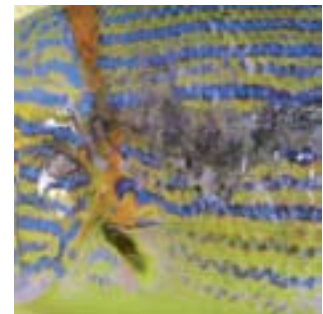
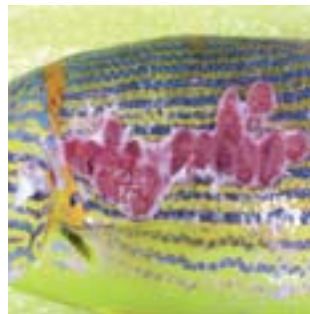
Maintenance and Therapy

imufin® soluble solution

Add to water at the rate of 0.5 to 2ml per litre. May be used for short immersion (1 to 6 hours) or by addition to system water.

imufin® powder

Ideal for oral administration in prepared diets and feeds.



Examples of fish undergoing medical therapy with imufin®





animal health services

Zoolife[®] Pharmaceuticals - Praziquantel

Zoolife supply bulk or small quantities of pharmaceutical grade praziquantel.

Praziquantel is routinely used off-license in preventive medicine programs in aquaria. This includes prophylactic therapeutics in pre shipment and quarantine, and in the management of parasite burdens in recirculation systems.

Zoolife are able to supply praziquantel in two forms:

- 1. Powder 2. Liquid dispersible**

In certain countries dispensing and discharge requirements may require fulfillment prior to supply and use.

Please contact our veterinary department for further technical information and advice on the use of this product. For details of specialist Zoolife pharmaceutical products, please visit www.zoolife.org

ZOOLAB[®]

Zoo and Wildlife Laboratories

Zoolab is able to offer specialist diagnostic, laboratory and manufacturing facilities to support preventive medicine and research programs.

Veterinary

Comprehensive histopathology facilities and image database to assist with preventive medicine and disease investigation programmes. Specialist manufacturing facilities including tablet production.

Vaccine Manufacture

Zoolab Mono or multivalent vaccine manufacture for zoos, aquaria and aquaculture facilities. Production is fully validated and offers tailored vaccines for use in preventive medicine programs.

Microbiology

Specialist Zoolab media for use with marine systems.

Genetic sequencing and data base maintenance of recovered pathogens.

Water Analysis

Zoolab offers an extremely comprehensive water analysis service specialising in detailed water chemistry.

Iodine Analysis

Zoolab is able to perform dissolved iodate and iodide analysis on water samples to a high degree of accuracy. This service has been established to allow an understanding of environmental status in relation to diet and control measures.

Ecotoxicology

Zoolab has a significant data base resource and knowledge of fish and aquatic invertebrate toxicology.



NOAH Compendium 2008 - Zoolife Data Sheets

IMUFIN® ORAL POWDER

Presentation Packs of 25g and 100g of IMUFIN® Oral Powder for administration to ornamental fish and aquatic invertebrates, containing 1,3-1,6 Beta Glucans, lipids, vitamins and antioxidants.

Uses IMUFIN® Oral Powder is designed for use with fish and aquatic invertebrates including tropical and coldwater species:

- enhancement of the immune response
- management of wounds and ulcers
- improving skin and fin condition
- routine preventive medicine management of stock during acclimation into new environments including quarantine and displays
- prior to vaccination and during vaccination regimes

Dosage and administration Add IMUFIN® Oral Powder to feed at the rate of 60mg/kg - 120mg/kg bodyweight per day for up to 6 consecutive weeks. Pulse therapy may be used allowing a longer duration of treatment. As an example, four weeks of treatment, a 10 day treatment free interval then two to four week treatment period may be used.

Pellet, Flake and Granulated Feeds: Distribute the powder over feed and bind onto food with a small quantity of water or suitable oil. Fish, vegetable or plankton oil can be used dependent on species and application.

Extruded or Gel Feeds: Add to feeds prior to makeup and/or extrusion. IMUFIN® is included in REEF GEL® Veterinary Diet for marine fish and invertebrates so that no further addition is required making therapy simple and effective.

Large Species including Groupers, Eels, Sharks and Rays: Place the product directly within the feed as a powder or paste made by adding a small quantity of water to the powder.

For medical management of acute surface wounds, skin and fin conditions it is recommended that IMUFIN® Oral Powder is combined with the use of IMUFIN® Soluble Solution.

See www.zoolife.com for further information.

Contra-indications, warnings, etc Wash hands after use. For animal treatment only. Keep out of the reach and sight of children. Do not use in animals intended for human consumption.

Pharmaceutical precautions Keep below 25°C. Keep the pack sealed between use. Do not contaminate the pack. Do not freeze.

Legal category SAES (This veterinary medicine is marketed in accordance with the Small Animal Exemption Scheme.)

Packaging Quantities 25g and 100g Packs

Further information The active ingredient 1,3-1,6 soluble beta glucans in association with lipids, vitamins and antioxidants is known to assist with macrophage stimulation leading to enhancement of the immune response, improved wound healing rates and improvement in skin and fin condition. Higher levels of immunity assist with protection against disease and infections. The use of IMUFIN® Oral Powder in preventive medicine regimes and in the management of diseases including protozoan and bacterial infections, and in the treatment of skin and fin wounds has been shown to be highly beneficial. Where appropriate, the use of antibiotics should be considered during treatment. For further information visit www.zoolife.com.

UK Patent GB 2394659. International Patents Pending.

IMUFIN® SOLUBLE SOLUTION

Presentation Packs of 20ml or 100ml liquid for dilution in water for administration to ornamental fish and aquatic invertebrates, containing 1,3-1,6 soluble Beta Glucans, lipids, vitamins and antioxidants.

Uses IMUFIN® Soluble Solution is designed for use with fish and aquatic invertebrates including tropical and coldwater species:

- enhancement of the immune response
- management of wounds and ulcers
- improving skin and fin condition
- routine preventive medicine management of stock during acclimation into new environments including quarantine and displays
- prior to vaccination and during vaccination regimes

Dosage and administration Add IMUFIN® Soluble Solution to water at a rate of 0.5ml - 2ml per litre.

For medical management of wounds, skin and fin conditions use a short bath immersion at 1ml to 2ml per litre for 1 to 6 hours daily or on alternate days until resolution.

For routine preventive medicine and acclimation of stock and prior to vaccination use a single dose of 2ml per litre for 1 to 3 hours.

IMUFIN® Soluble Solution may alternatively be added to systems at the rate of 0.25 - 1 ml per litre with re-dosing interval dependent on water quality, water change rate, filtration and environmental parameters.

Dilute and mix thoroughly in system or acclimation water. Use standard methods for maintaining environmental water quality during use.

IMUFIN® Soluble Solution may be used in fish and invertebrates receiving IMUFIN® Oral Powder.

See www.zoolife.com for further information.

Contra-indications, warnings, etc Wash hands after use. For animal treatment only. Keep out of the reach and sight of children. Do not use in animals intended for human consumption.

Pharmaceutical precautions Keep below 25°C. Once opened keep refrigerated. Keep the pack sealed between uses. Do not contaminate the solution. Do not freeze.

Legal category SAES (This veterinary medicine is marketed in accordance with the Small Animal Exemption Scheme.)

Packaging Quantities 20ml and 100ml bottles.

Further information The active ingredient 1,3-1,6 soluble beta glucan in association with lipids, vitamins and antioxidants is known to assist with macrophage stimulation leading to enhancement of the immune response, improved wound healing rates and improvement in skin and fin condition. Higher levels of immunity assist with protection against disease and infections. The use of IMUFIN® Soluble Solution in preventive medicine regimes and in the management of diseases including protozoan and bacterial infections, and in the treatment of skin and fin wounds has been shown to be highly beneficial. IMUFIN® Soluble Solution can be used in animals receiving IMUFIN® Oral Powder. Where appropriate, the use of antibiotics should be considered during treatment.

UK Patent GB 2394659. International Patents Pending.

NOAH Compendium 2008 - Zoolife Data Sheets

REEF GEL® VETERINARY DIET - PROFESSIONAL TWIN PACK **REEF GEL® VETERINARY DIET – READY TO USE**

Presentation

REEF GEL® Veterinary Diet - PROFESSIONAL TWIN PACK: Packs of 50g, 100g, 1kg and 4kg of REEF GEL® Veterinary Diet as a powdered diet supplied with a separate container of selected PLANKTONIC™ lipids and antioxidants for distribution onto the feed. This would allow a veterinary surgeon to incorporate active medicines into the dry phase of the diet before the addition of lipids and antioxidants, helping to ensure distribution and subsequent protection of active medicines with excellent palatability. Cold set instant formulation assists with optimal protection of nutrients and active medicines. For administration to ornamental fish and aquatic invertebrates, containing 1,3-1,6 Beta Glucans, phospholipids, vitamins, natural antioxidants and PLANKTONIC™ lipids.

REEF GEL® Veterinary Diet – READY TO USE: Packs of 50g, 100g, 1kg and 4kg of REEF GEL® Veterinary Diet for administration to ornamental fish and aquatic invertebrates, containing 1,3-1,6 Beta Glucans, phospholipids, vitamins, natural antioxidants and PLANKTONIC™ lipids. Cold set instant formulation allows optimal protection of nutrients.

Uses REEF GEL® Veterinary Diets are designed for use with fish and aquatic invertebrates including tropical and coldwater species. The diets are designed for use in medical treatment regimes and in the routine preventive medicine management of stock during acclimation into new environments including quarantine and displays. The diets contain the immunomodulator complex IMUFIN® and optimised vitamin, antioxidant and lipid classes. The Professional Twin Pack would allow a veterinary surgeon to distribute active medicines such as antibiotics or anti-parasitic products into the dry phase before the addition of the supplied PLANKTONIC™ lipids and antioxidants. Following the period of application REEF GEL® Daily Use Diet should be used for long term maintenance where appropriate for the species.

Dosage and administration Feed REEF GEL® Veterinary Diet - Ready To Use ad lib for up to 6 consecutive weeks.

Feed REEF GEL® Veterinary Diet – Professional Twin Pack at the feed rate determined by the active medicines and species to allow for optimal medicine delivery in feed.

Gradually add cold wet feeds and/or cold water while mixing to form an instant moist crumb.

Feed as a moist crumb for small species. Gently squeeze into flakes or gel blocks for larger species. Gel blocks can be simply placed into hanging feeders or onto the inner glass/acrylic or into rockwork or artificial corals. Once made up the diet should be stored in an airtight container and used within 16 hours or if medicines are incorporated use at the rate determined by the actives but not exceeding 16 hours. Select wet feed type and quantity to provide for species requirements and dietary variation. Common examples of wet feeds for reef fish are mysis, artemia, krill, plankton, mussel, cockle and prawn. See www.zoolife.com for further information.

Contra-indications, warnings, etc Wash hands after use. For animal treatment only. Keep out of the reach and sight of children. Additional precautions associated with the REEF GEL® Veterinary Diet – Professional Twin Pack will be dependent on the nature of any active medicines incorporated in to the feed. Do not use in animals intended for human consumption.

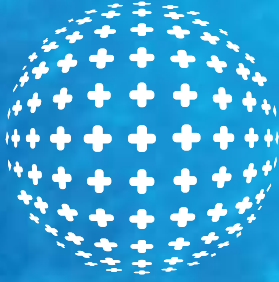
Pharmaceutical precautions Keep below 25°C. Keep the pack sealed between use. Do not contaminate the pack. Do not freeze.

Legal category SAES (This veterinary medicine is marketed in accordance with the Small Animal Exemption Scheme.)

Packaging Quantities 50g, 100g, 400g, 1kg, 4kg

Further information REEF GEL® Veterinary Diets contain IMUFIN® and optimised natural dietary components and are formulated for use in quarantine, for preventive medicine regimes and in the management of skin and fin conditions, in vaccination regimes and in the management of diseases including protozoan and bacterial infections. The diet is ideal for use pre and post shipping. See www.zoolife.com for further information.

UK Patent GB 2395414. International Patents Pending.



zoolife[®]

Animal Health and Nutrition



Bringing science to life[™]

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