eSHa 2000® - FUNGUS, FINROT & BACTERIA TREATMENT

MULTI PURPOSE TREATMENT FOR AQUARIUM FISH WITH UNIQUE WIDE RANGE ACTION

How do I know when to use eSHa 2000?

Disease diagnosis is the first step toward successful and rapid disease cure. Most fish diseases are highly contagious and spread quickly in aquarium conditions so prompt diagnosis and treatment is advised. There are some 'early warning signals' which should be watched for as these can indicate the onset of a disease.

Skin: The skin is the first line of defence and as such it is often the first to show signs of attack from infection. Any changes in skin colour or appearance should be closely watched for.

Fins: Watch your fish's fins. Fins which are held close to the body signal an illness, particularly on live bearing fish.

Swimming behaviour: unusual or sluggish swimming behaviour can indicate the onset of a disease.



What fish can I treat with eSHa 2000?

Tropical fish ✓ Coldwater fish ✓ Marine fish ✗

eSHa 2000 is very well tolerated by fish, plants and filters.

What does it treat?

eSHa 2000 treats primary and secondary fungal infections, bacterial skin infections and skin / gill parasites. An added advantage is its ability to assist wound healing and to protect the skin layer. The table below shows the specific disease organisms and conditions that eSHa 2000 treats. eSHa 2000's wide range action means the danger of choosing the wrong treatment is virtually eliminated.

DISEASE SYMPTOMS

arers and especially mollies.

1 Your fish swim awkwardly with clamped fins and a characteristic rolling and swaying action. Often affects livebe-



DISEASE NAME

'Shimmying disease' - also called 'shimmies'.

2 Discoloured skin patches, cloudy fins, whitish film over the skin surface. Secondary bacterial and fungus infections are common.



'Protozoan parasites' - a wide range of illnesses often caused by any number of microscopic external protozoan parasites.

3 White or slightly off white fluffy growths on the fins or body of your fish. Often found on wounds or broken skin. A classic secondary infection.



'Fungus' - most likely to be fungal species such as saprolegnia and achyla.

4 Your fish start to flick / rub against plants, decor and gravel in your aquarium. Your fish appear nervous and skittish.



'Protozoan parasites' - (See fig. 2). Possibly a bacterial infection. If accompanied with small white spots on fins / body then it is 'whitespot' (use eSHa Exit with eSHa 2000).

5 Open wounds or reddened patches of skin along the body of your fish.



'Ulcers or wounds' - sustained from vigorous feeding / breeding. Likely to be infected with secondary infection such as 'fungus' if left untreated.

6 The lips and mouth of your fish firstly become discoloured then develop a fluffy growth making feeding difficult if not impossible.



'Mouth fungus' - the common term for a bacterium called flexibacter.

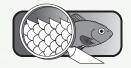
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DISEASE SYMPTOMS

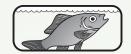
DISEASE NAME

7 Your fish appear swollen with fins protruding from the skin. Red areas often visible at the base of raised scales. Bases of fins and around anus appears red or blood-shot. Eyes may protrude from body ('pop-eye').



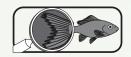
'Dropsy' - the common name for a combined viral and/or bacterial infection.

8 Your fish show rapid gill movement and tend to hang around the surface of the water or near a source of aeration. Despite rapid breathing, your fish remain listless and lethargic.



'Gill problems' - can be a symptom of infection from certain fungi or worms, or, poor water quality (eSHa 2000 can not remedy water quality problems).

9 The fins of your fish appear ragged and sore. The edges have a distinctive red or white 'edge'.



'Finrot' - sustained from vigorous feeding / breeding. Likely to be infected with secondary infection such as 'fungus' if left untreated.

10 Your neon tetras appear pale, display unusual swimming behaviour, possibly suffer from fin rot and appear very thin. Discolouration appears in a saddle shape across the back just behind the dorsal fin. The symptoms deteriorate before the whole fish loses its colour.



'Neon tetra disease' - although common on neon tetras this disease can affect other fish species particularly barbs and danios. Fish can carry the parasite and not become infected.

eSHa 2000 blocks neon tetra disease.

eSHa 2000 treats all these specified disease organisms as well as a wide range of infections characterised by the above symptoms. These infections

are often very contagious and can easily spread to healthy fish. The sooner you treat your fish the better their chance of recovery.

Will eSHa 2000 treat every disease organism?

eSHa 2000's broad range of activity is effective against over eighteen disease organisms and conditions. However, it will not cure every ailment your fish may encounter. It is not a miracle cure and can not bring dead fish back to life.

How do I keep my fish in good health?

After an illness give your fish a dose of eSHa Optima. eSHa Optima is a blend of trace elements, vitamins and minerals designed to keep you fish in the best of health. It stimulates and supports the natural immune defences and it speeds up full recovery from illness.

What precautions must I take when using eSHa 2000?

- Water changes?

It is generally not necessary to do a water change before or after using eSHa 2000. However, there are a few exceptions where a partial water change should be carried out before treating the aquarium:

1 In the case of poor water quality. Regular testing with eSHa aqua-quick-test can identify water quality problems in time to take corrective action when needed.

- 2 If you are close to your regular water change.
- **3** If using any water conditioners.
- **4** If you have just used or are using another treatment. (2 x 40% water changes should be carried out over a period of two days + appropriate filtering i.e. Carbon).

Replacing some of the water during or after treatment effectively removes some of the treatment. Compensate by adding a proportional amount of medication after a water change.

- Filtering?

You may continue to filter over non-adsorbing materials such as filter-wool, sand, gravel etc. Always remove chemical 'active' filter media such as activated carbon, uv, oxidisers, resins etc. As these can have a negative influence on the action of eSHa 2000. Keep filters running day and night.

- Overdosing?

Overdosing is not recommended. However, eSHa 2000 usually remains nontoxic (under normal conditions) if more than the recommended dose is accidentally added.

- Other treatments?

Never combine treatments unless the manufacturer specifically states that it is safe to do so.

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Dosage

To treat the disease organisms and conditions outlined in the table (overleaf) use a standard 3 day dose of eSHa 2000. Multi-day dosage achieves exceptional results whilst causing minimal distress to your fish.

1 Calculate the volume of your aquarium. Calculate only the area occupied by water.

Litres	Length x Widt	: 1000					
Gallons	Length x Widt	: 276					
1 Litre = 0	0.22 Gallons	1 Gallon = 4.54 Litres					

2 Locate your aquarium volume on the dosage scale (metric or imperial). Read down to find the corresponding number of drops required for days one, two and three. Note: dosage on days two and three is identical.

Example: a 100 litre (22 gallon) aquarium needs 25 drops on day one, 12 drops on day two, 12 drops on day three.

3 Add drops of eSHa 2000 to your aquarium by holding the bottle upside down and squeezing the pipette (20 drops = 1ml).

Standard dosage

(for 100 litres / 22 gallons)

Day 1: 25 drops Day 2: 12 drops

Day 3: 12 drops

One 20ml bottle of eSHa 2000 is enough to complete a three day dosage for an 800 litre (175 gallon) aquarium.

Dosage exceptions

Preventative dosage use day one only of the standard dose (25 drops per 100 litres) to prevent problems with new fish and plants. Use this same dosage when transporting fish to prevent problems caused by damage due to capture, stress and trauma. Extra heavy dosage double the standard three day dose for very ill fish, for prevention of egg mould and for fast initial results. In severe cases the secondary dose (days 2 / 3) may be continued for a number of days. Soft water dosage in 'soft' water (low carbonates) increase the standard dosage. If GH is less than 4°dGH then double the 3 day standard dosage (increase from 25 to 50 drops on day 1 & from 12 - 24 drops on days 2/3).

GALLONS	5	6 7	8	9	10 1	11 12	13	14	15 16	17 1	8 19	20	21 2	22 23	24 2!	5 26 2	7 28 29	30
♦ DAY 1	6	7 8	9	10	11 12	13 14	1 15	16	17 18	19 20	21 22	2 23	3 24 2	25 26	27 28	29 30 3	31 32 33	34
♦ DAY 2 / 3 [3	4		5	6	7	'	8	9	10	1	1	12	13	14	15	16	17
LITRES 2	0	30	1 .	40		50	60)	70	80		90		00	110	120	130	140
♦ DAY 1	6	7 8	9	10	11 12	13 14	1 15	16	17 18	19 20	21 22	2 23	24 2	25 26	27 28	29 30 3	31 32 33	34
♦ DAY 2 / 3	3	4		5	6	7	'	8	9	10	1	1	12	13	14	15	16	17

Does eSHa 2000 have any other uses?

Yes! eSHa 2000 has several other uses:

- **1** As a disinfectant for fish, plants and equipment before they are added to your aquarium. Treat your whole aquarium with a standard dose of eSHa 2000 (25 drops per 100 litres) after the newcomers are introduced (note: visibly ill newcomers should be held in quarantine).
- **2** To help hatch eggs and raise fry. A standard 3 day dose of eSHa 2000 helps prevent the eggs catching fungus and helps protect the fry after they have hatched. Success rate is improved.
- **3** To treat successive infection. eSHa 2000 can be used again if fish get infected with another disease after recovering from a previous condition. A successive infection can indicate other problems such as poor water quality. Commonly, fish get infected with 'whitespot' disease which takes advantage of the weakened immune system. eSHa 2000 can be safely used in combination with eSHa Exit (effective against many spot diseases), providing an effective tool to combat this infection.

Warnings:

- always read the leaflet before use.
- this product may stain if spilt.
- keep out of reach of children.
- store bottle and leaflet in original box (shelf life = 5 years)
- for ornamental fish only.
- keep away from cuts, eyes and other sensitive areas.
- This information is subject to change. Please check if you have the latest version.
- This information is general product information not to be mistaken for the instruction leaflet.
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TOGETHER WE WILL FIND THE SOLUTION

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