SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Liquid Life-Aid Oral Solution

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Active Substance(s)	**% w/v**
Glucose Monohydrate	30.6675
Sodium Chloride	5.3750
Sodium Propionate	0.2625
Potassium Dihydrogen Orthophosphate	2.5425
Glycine	3.8750

Excipient(s)

Quinolene Yellow (E104)	0.0200

For a full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Oral solution.
A yellow oral solution.

4. CLINICAL PARTICULARS

4.1 Target species

Calves
Pigs
Sheep

4.2 Indications for use, specifying the target species

Liquid Life-Aid is indicated in the reversal of the process of dehydration and electrolyte loss associated with scours in calves and pigs whether due to nutritional bacterial or viral causes. It is also indicated as an aid in recovery from pregnancy toxaemia and reversal of hypoglycaemia in sheep.

4.3 Contraindications

None.

4.4 Special Warnings for each target species

Piglets must not be left without a supply of prepared solution, drinking water or sow's milk during the period of treatment.
Weaned pigs sometimes over-drink the prepared solution if given *ad lib*.
The concentration should be reduced to 50% of normal when this is encountered.

4.5 Special precautions for use

Special precautions for use in animals

Adequate colostrum should have been fed to calves. Normal feeding should be resumed after the course of treatment. Fresh solutions should be prepared for each administration and if unused within 24 hours should be discarded.

Special precautions to be taken by the person administering the veterinary medicinal product to animals

Wash hands after use.

4.6 Adverse reactions (frequency and seriousness)

No undesirable effects.

4.7 Use during pregnancy, lactation or lay

Liquid Life-Aid can be safely administered during pregnancy and lactation.

4.8 Interaction with other medicinal products and other forms of interaction

None known.

4.9 Amounts to be administered and administration route

Calves and Pigs:
Liquid-Life-Aid is intended for oral administration only after dilution with 11.5 times its own volume of water.

Bought in calves: For nutritional support, administer 2 litres of prepared solution replacing the first feed on arrival. For the next feed give 1 litre of solution and 1 litre of milk replacer after which normal diet may be resumed.

Scouring calves: All milk and milk replacer is withdrawn. 2 litres of freshly prepared solution to be given twice daily for 2 days. For the

next 4 feeds (2 days) 1 litre of solution and 1 litre of milk replacer to be administered. Thereafter normal diet is resumed. If symptoms are severe, the solution may be fed 3 or 4 times daily. The solution may be given for a maximum of 4 days only, when administered on its own.

Pigs - Suckling pigs: When symptoms appear, fresh solution to be made available to the whole litter in a clean container, with access to water and sow's milk maintained throughout dosing period. Allow approximately 200-300 ml (7-10 fl oz) of solution per piglet daily, the amount being determined by the age of the piglets, the number in the litter and the severity of the symptoms. Occasionally restriction of the water supply for a few hours may be necessary to encourage pigs to start drinking the prepared solution. Treatment may be continued for up to 8 days in total if symptoms persist.

Weaned pigs: Fresh solution to be made available to pigs showing signs of scour, allowing up to 1 litre daily for each weaner depending on the age of the pigs and the severity of the symptoms. It is advisable to restrict solid feed intake for the initial 1-2 days of dosing but fresh water supply should be maintained. Treatment may be continued for up to 8 days in total if symptoms persist.

Periods of stress: Liquid Life-Aid may be administered to animals for 2-3 days following periods of stress i.e. transporting.

Sheep: In case of pregnancy toxaemia in sheep 160ml of undiluted product should be administered using a suitable drenching bottle. Treatment should be repeated 3- 6 times daily as required.

4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary

Not applicable.

4.11 Withdrawal period

Meat/Milk – Zero days/hours.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Metabolic & Fluid Preparation

ATC Vet Code: QA07CQ02

5.1 Pharmacodynamic properties

Liquid Life Aid on reconstitution contains the following available ions, Sodium, Potassium, Phosphate, Propionate, Chloride, plus Glycine and Dextrose. Following oral administration to calves and pigs the animals intestinal absorptive mechanisms remain functional. This

maintains the absorption of sodium and water into the blood and a reversal of the dehydration process which is the major cause of death in scours.
The glucose, glycine and propionate provide rapid source of replacement energy where ketosis results from high glucose demands.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Quinolene Yellow (E104)
Sodium Formaldehyde Sulphoxylate
Disodium Edetate Dihydrate
Chlorocresol
Sodium Hydroxide/Hydrochloric Acid (for pH adjustment)
Water Purified

6.2 Incompatibilities

None known.

6.3 Shelf life

Shelf-life of the veterinary medicinal product as packaged for sale : 18 months.

6.4 Special precautions for storage

Store in a dry place. Care should be taken to replace the lid tightly once the bottle has been opened.

6.5 Nature and composition of immediate packaging

1 litre blue high density translucent polyethylene dispenser bottle with blue polypropylene wadded caps.

6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Norbrook Laboratories Limited
Station Works
Newry
Co. Down, BT35 6JP

Northern Ireland

8. MARKETING AUTHORISATION NUMBER(S)

Vm 02000/4074

9. DATE OF FIRST AUTHORISATION

14th August 1991

10. DATE OF REVISION OF THE TEXT

February 2009