

Summary of Product Characteristics

1. TRADE NAME OF THE MEDICINAL PRODUCT

Agiolax[®]

DRUGS-ABOUT.COM

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

5 g of granules (= 1 teaspoonful) contain:

Plantaginis semen ovatae (Seeds of Plantago ovata)	2.60 g
Plantaginis testa ovatae (Ispaghula husk)	0.11 g
Sennae fructus angustifoliae (Tinnevelly senna pods) (equivalent to 15 mg of sennosides)	0.5 - 0.66 g

1 teaspoonful of Agiolax contains approx. 0.96 g of sucrose (equivalent to 0.08 bread units)

3. PHARMACEUTICAL FORM

Granules

4. CLINICAL PARTICULARS

4.1 Therapeutic Indications

For short-term treatment of constipation

4.2 Posology and method of administration

The maximum daily dose must not exceed 30 mg of hydroxyanthracene derivatives, which, on average, is equivalent to 10 g (2 teaspoonfuls) of Agiolax granules.

Consequently, the dosages for adults and children over 10 years of age are as follows:

1 to 2 teaspoonfuls of Agiolax granules once daily. The granules should be swallowed whole with an abundant amount of liquid (1/4 litre) after the evening meal.

The individually correct dose is the lowest dose required to achieve a soft formed stool.

An interval of one hour should be adhered to after the intake of other drugs. The action sets on within approx. 8 to 12 hours. The laxative should not be taken over a longer period than 1 to 2 weeks and it should not be taken in higher doses.

4.3 Contra-indications

Abnormal stenoses in the gastro-intestinal tract; ileus; acute inflammatory intestinal diseases, e.g. Morbus Crohn, Colitis ulcerosa, appendicitis, abdominal pain of unknown cause; severe dehydration with water and electrolyte losses; children under 10 years of age; Diabetes mellitus difficult to control.

4.4 Special warnings and specialⁱⁱ precautions for use

This product should be taken with at least 150 ml of water or other fluid. Taking this product without adequate fluid may cause it to swell and block the throat or esophagus and may cause choking. The patient should not take this product if he/she has ever had difficulty in swallowing or has any throat problems. If the patient experiences chest pain, vomiting, or difficulty in swallowing or breathing after taking this product, immediate medical attention should be sought.

Prolonged use of stimulant laxatives can intensify the sluggishness of the bowels.

The preparation should be used only if no therapeutic effect can be achieved by means of a change in diet or with the aid of bulking preparations.

Note:

When Agiolax is taken by adult incontinent persons, prolonged contact of the skin with the faeces should be avoided by changing the sanitary towels.

4.5 Interaction with other medicaments and other forms of interaction

In cases of chronic use/abuse, potassium deficiency can potentiate the effect of cardiac glycosides and influence the action of antiarrhythmics. Losses of potassium can be enhanced in combination with diuretics, adrenocortical steroids and liquorice root.

The absorption of concurrently administered drugs can be delayed.

A reduction of the insulin dose may be required in insulin-dependent diabetics.

4.6 Pregnancy and lactation

In the first three months of pregnancy Agiolax should be used only if constipation cannot be remedied by a change in diet or with the aid of bulking agents.

Note:

Active metabolites such as rhein pass in small amounts into the maternal milk. No laxative effect on breast-fed babies was observed.

4.7 Effects on ability to drive and use machines

None.

4.8 Undesirable effects

Very rare, spasmodic gastro-intestinal complaints may occur. In these cases, a reduction of the dose is required. In the course of treatment, a harmless red colouring of the urine may appear.

In cases of chronic use/abuse, disorders in the balance of water or electrolytes may occur. Diarrhoea can result, in particular, in potassium loss. Potassium loss may produce disorders of cardiac function and myasthenia, in particular if cardiac glycosides, diuretics and adrenocortical steroids are taken concurrently. In the case of chronic use, albuminuria and haematuria can occur. Furthermore, pigmentary infiltration in the intestinal mucosa (pseudomelanosis coli) can appear which, as a rule, recedes after discontinuation of the preparation.

Very rare, hypersensitivity reactions to *Plantago ovata* can occur.

4.9 Overdose

In the event of inadvertent or deliberate overdose, there may be painful intestinal cramps and severe diarrhoea with consequent losses of water and salt and severe gastro-intestinal complaints may be possible. In the instructions for use, the patients are informed as follows: If you have taken an overdose, please consult a doctor immediately. The doctor will decide what countermeasures (e.g. administration of fluid and salts) may be necessary.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamics

The mucilages and fibres from the seeds and husks of *Plantago ovata* (Indian flea-wort seeds, Indian flea-wort husks) enhance by their physiological action the passage of the contents of the large intestine. By virtue of their water binding capacity and swelling they increase the volume of the faeces and by stimulating the stretch reflex they accelerate colonic passage. The swelling of the mucilages produces a softening of the stools and improves intestinal lubrication.

The action of *Plantago ovata* drugs on bowel motility is reinforced by senna glucosides (sennosides) from senna pods.

1,8-dihydroxyanthracene derivatives have a laxative effect. With the sennosides or their active metabolite in the colon, rhein anthrone, this effect is chiefly based upon the influence exerted on the motility in the colon in the sense of an inhibition of stationary contractions and a stimulation of propulsive contractions. The outcome is acceleration of bowel transit and by shortening the time during which the faeces remain in the large intestine water absorption is reduced. In addition, by stimulation of the active chloride secretion, water and electrolytes are secreted. The onset of action of anthracene derivatives can be expected within 8 to 12 hours.

The special pharmaceutical preparation of *Plantago ovata* drugs and senna pods in the form of granules ensures that the release of sennosides from Agiolax is retarded and a rapid cumulation of high sennoside concentrations is avoided.

5.2 Pharmacokinetic properties

No systematic investigations into the kinetics of plant-based drug preparations are available, but it may be assumed that the aglycons contained in the drug are absorbed already in the upper small intestine. The β -glycoside-bound glycosides are prodrugs which are neither split nor absorbed in the upper gastrointestinal tract. In the large intestine they are converted by bacterial enzymes into rhein anthrone. Rhein anthrone is the laxative metabolite. Systemic availability is very low. In experimental animal models, < 5% of the dose are excreted in the urine in form of oxidised, partially conjugated products of rhein and sennidins. The greater part of rhein anthrone (> 90%) is bound in the faeces to the intestinal contents and excreted in the form of polymeric compounds.

Active metabolites such as rhein pass in negligible amounts into the breast milk. No laxative effect in breast-fed babies was observed.

In animal studies, the placental transfer of rhein is extremely low.

5.3 Preclinical Safety Data

Plant-based drug preparations have, probably because of the aglycon content, a higher general toxicity than pure glycosides. In vitro, a senna extract proved mutagenic, the pure substances sennosides A and B were negative. In vivo tests on the mutagenicity with a defined extract from senna pods produced negative results. Preparations containing 1.4 to 3.5% of anthraquinones (calculated as the sum of separately determined compounds) were investigated, which analytically correspond to 0.9 - 2.3% of potential rhein, 0.05 - 0.15% of potential aloe emodin and 0.001 - 0.006% of potential emodin. Positive results are in part available for aloe emodin and emodin. Investigations into the carcinogenicity are available with a concentrated sennoside fraction containing approx. 40.8% of anthranoids, from these 35% of total sennosides (calculated as the sum of separately determined compounds), equivalent to approx. 25.2% of potential total rhein, 2.3% of potential aloe emodin and 0.077% of potential emodin (determined by calculation).

The tested substance contained 142 ppm free aloe emodin and 9 ppm free emodin. In this study on rats over a period of 104 weeks with doses of up to 25 mg/kg bodyweight, no substance-related cumulation of tumours was observed.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Talc
Acacia
Iron oxides
Paraffin
Aromatics
Sucrose

6.2 Incompatibilities

None known.

6.3 Special precautions for storage

Do not store above 30°C.

6.4 Presentation

Packs of 200 g. granules, with a measuring spoon.

6.5 Instructions for use/handling

None

7. REGISTRATION NUMBER

062 702 2366 00

7. MANUFACTURER

Madaus AG
D-51101 Koln, Germany.

8. IMPORTER

Salomon, Levin & Elstein Ltd.
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