

## SUMMARY OF PRODUCT CHARACTERISTICS

### 1 NAME OF THE MEDICINAL PRODUCT

Compound Macrogol 13.72 g powder for oral solution

### 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each sachet of Compound Macrogol 13.72 g powder for oral solution contains the following active ingredients:

Macrogol 3350	13.125 g
Sodium chloride	350.7 mg
Sodium bicarbonate	178.5 mg
Potassium chloride	46.6 mg

The content of electrolyte ions per sachet when made up to 125 ml of solution is as follows:

Sodium	65 mmol/l
Chloride	53 mmol/l
Potassium	5.4 mmol/l
Bicarbonate	17 mmol/l

#### Excipient(s) with known effect

For the full list of excipients, see section 6.1

### 3 PHARMACEUTICAL FORM

Powder for oral solution.

Free flowing white powder.

### 4 CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

For the treatment of chronic constipation in adults and children above 12 years. Compound Macrogol is also effective in resolving faecal impaction, defined as refractory constipation with faecal loading of the rectum and/or colon in adults and children above 12 years.

## 4.2 Posology and method of administration

### Posology

#### **Chronic constipation**

A course of treatment for constipation with Compound Macrogol does not normally exceed 2 weeks, although this can be repeated if required.

As for all laxatives, prolonged use is not usually recommended. Extended use may be necessary in the care of patients with severe chronic or resistant constipation, secondary to multiple sclerosis or Parkinson's disease, or induced by regular constipating medication in particular opioids and antimuscarinics.

**Adults, adolescents and the elderly:** 1 –3 sachets daily in divided doses, according to individual response.

For extended use, the dose can be adjusted down to 1 or 2 sachets daily.

#### *Paediatric population*

**Children (below 12 years old):** Not recommended. Alternative Compound Macrogol Paediatric powder for oral solution 6.86 g product is available for children.

#### **Faecal impaction**

A course of treatment for faecal impaction with Macrogol does not normally exceed 3 days.

**Adults, adolescents and the elderly:** 8 sachets daily, all of which should be consumed within a 6 hour period.

#### *Paediatric population*

**Children (below 12 years old):** Not recommended. Alternative Compound Macrogol Paediatric powder for oral solution 6.86 g product is available for children.

**Patients with impaired cardiovascular function:** For the treatment of faecal impaction the dose should be divided so that no more than two sachets are taken in any one hour.

**Patients with renal insufficiency:** No dosage change is necessary for treatment of either constipation or faecal impaction.

#### **Method of administration**

Each sachet should be dissolved in 125 ml water. For use in faecal impaction 8 sachets may be dissolved in 1 litre of water.

### **4.3 Contraindications**

Intestinal perforation or obstruction due to structural or functional disorder of the gut wall, ileus, severe inflammatory conditions of the intestinal tract, such as Crohn's disease and ulcerative colitis and toxic megacolon.

Hypersensitivity to the active substance(s) or to any of the excipients listed in section 6.1.

### **4.4 Special warnings and precautions for use**

The fluid content of Compound Macrogol when re-constituted with water does not replace regular fluid intake and adequate fluid intake must be maintained.

Diagnosis of impaction/faecal loading of the rectum should be confirmed by physical or radiological examination of the abdomen and rectum.

Mild adverse drug reactions are possible as indicated in Section 4.8. If patients develop any symptoms indicating shifts of fluids/electrolytes (e.g. oedema, shortness of breath, increasing fatigue, dehydration, cardiac failure) Compound Macrogol should be stopped immediately and electrolytes measured, and any abnormality should be treated appropriately.

The absorption of other medicinal products could transiently be reduced due to an increase in gastro-intestinal transit rate induced by Compound Macrogol (see section 4.5).

Compound Macrogol contains 0.6213 mmol (24.230) of potassium per sachet. This should be taken into consideration if the patient takes more than one sachet daily and has reduced kidney function or is on a controlled potassium diet.

#### *Paediatric population*

There is no clinical data on the use of Compound Macrogol 13.72 g, powder for oral solution in children, therefore it should not be used in children below 12 years of age.

### **4.5 Interaction with other medicinal products and other forms of interaction**

Macrogol raises the solubility of medicinal products that are soluble in alcohol and relatively insoluble in water.

There is a possibility that the absorption of other medicinal products could be transiently reduced during use with Compound Macrogol (see section 4.4). There have been isolated reports of decreased efficacy with some concomitantly administered medicinal products, e.g. anti-epileptics.

#### 4.6 Fertility, pregnancy and lactation

##### Pregnancy

There are limited amount of data from the use of Compound Macrogol in pregnant women. Studies in animals have shown indirect reproductive toxicity (see section 5.3). Clinically, no effects during pregnancy are anticipated, since systemic exposure to macrogol 3350 is negligible.

Compound Macrogol can be used during pregnancy.

##### Breastfeeding

No effects on the breastfed newborn/infant are anticipated since the systemic exposure of the breast-feeding woman to Macrogol 3350 is negligible.

Compound Macrogol can be used during breast-feeding.

##### Fertility

There are no data on the effects of Compound Macrogol on fertility in humans. There were no effects on fertility in studies in male and female rats (see section 5.3).

#### 4.7 Effects on ability to drive and use machines

Compound Macrogol has no or negligible influence on the ability to drive and use machines.

#### 4.8 Undesirable effects

Reactions related to the gastrointestinal tract occur most commonly.

These reactions may occur as a consequence of expansion of the contents of the gastrointestinal tract, and an increase in motility due to the pharmacologic effects of Compound Macrogol. Mild diarrhoea usually responds to dose reduction.

The frequency of the adverse effects is not known as it cannot be estimated from the available data.

<b>System Order Class</b>	<b>Adverse Event</b>
<b>Immune system disorders</b>	Allergic reactions, including anaphylaxis, angioedema, dyspnoea, rash, erythema, urticaria, and pruritus.
<b>Metabolism and nutrition disorders</b>	Electrolyte disturbances, particularly hyperkalaemia and hypokalaemia.
<b>Nervous system disorders</b>	Headache
<b>Gastrointestinal</b>	Abdominal pain, diarrhoea, vomiting,

<b>disorders</b>	nausea, dyspepsia, abdominal distension, borborygmi, flatulence, anal discomfort.
<b>General disorders and administration site conditions</b>	Peripheral oedema.

#### Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at Website: [www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard).

#### **4.9 Overdose**

Severe pain or distension can be treated by nasogastric aspiration. Extensive fluid loss by diarrhoea or vomiting may require correction of electrolyte disturbances.

## **5 PHARMACOLOGICAL PROPERTIES**

### **5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: Osmotically acting laxatives.  
ATC code: A06A D65

#### Mechanism of action

Macrogol 3350 acts by virtue of its osmotic action in the gut, which induces a laxative effect.

Macrogol 3350 increases the stool volume, which triggers colon motility via neuromuscular pathways. The physiological consequence is an improved propulsive colonic transportation of the softened stools and a facilitation of the defecation. Electrolytes combined with macrogol 3350 are exchanged across the intestinal barrier (mucosa) with serum electrolytes and excreted in faecal water without net gain or loss of sodium, potassium and water.

For the indication of faecal impaction controlled comparative studies have not been performed with other treatments (e.g. enemas). In a non-comparative study in 27 adult patients, Compound Macrogol cleared the faecal impaction in 12/27 (44%) after 1 day's treatment; 23/27 (85%) after 2 days' treatment and 24/27 (89%) at the end of 3 days.

#### Clinical efficacy and safety

Clinical studies in the use of Compound Macrogol in chronic constipation have shown that the dose needed to produce normal formed stools tends to

reduce over time. Many patients respond to between 1 and 2 sachets a day, but this dose should be adjusted depending on individual response.

## **5.2 Pharmacokinetic properties**

Macrogol 3350 is unchanged along the gut. It is virtually unabsorbed from the gastro-intestinal tract. Any macrogol 3350 that is absorbed is excreted via the urine.

## **5.3 Preclinical safety data**

Preclinical studies provide evidence that macrogol 3350 has no significant systemic toxicity potential, based on conventional studies of pharmacology, repeated dose toxicity and genotoxicity.

There were no direct embryotoxic or teratogenic effects in rats even at maternally toxic levels that are a multiple of 66 x the maximum recommended dose in humans for chronic constipation and 25 x for faecal impaction. Indirect embryofetal effects, including reduction in fetal and placental weights, reduced fetal viability, increased limb and paw hyperflexion and abortions, were noted in the rabbit at a maternally toxic dose that was 3.3 x the maximum recommended dose in humans for treatment of chronic constipation and 1.3 x for faecal impaction. Rabbits are a sensitive animal test species to the effects of GI-acting substances and the studies were conducted under exaggerated conditions with high dose volumes administered, which are not clinically relevant. The findings may have been a consequence of an indirect effect of Compound Macrogol related to poor maternal condition as the result of an exaggerated pharmacodynamic response in the rabbit. There was no indication of a teratogenic effect.

There are long-term animal toxicity and carcinogenicity studies involving macrogol 3350. Results from these and other toxicity studies using high levels of orally administered high molecular weight macrogols provide evidence of safety at the recommended therapeutic dose.

# **6 PHARMACEUTICAL PARTICULARS**

## **6.1 List of excipients**

Acesulfame Potassium

Lemon Flavour

## **6.2 Incompatibilities**

None are known.

**6.3 Shelf life**

4 years

Reconstituted solution: 24 hours

**6.4 Special precautions for storage**

Reconstituted solution: Store in a refrigerator (2°C - 8°C) and covered

**6.5 Nature and contents of container**

Sachet: Laminate consisting of four layers: low density polyethylene (LDPE), Aluminium, LDPE and paper. Pack sizes: Boxes of 6, 8, 10, 20, 30, 40, 50, 60 or 100 sachets.

Not all pack sizes may be marketed.

**6.6 Special precautions for disposal**

Throw away any solution not used within a 24 hour period.

**7 MARKETING AUTHORISATION HOLDER**

Strides Arcolab International Ltd.

Unit 4, Metro Centre, Tolpits Lane,

Watford, Hertfordshire, WD18 9SS,

United Kingdom.

**8 MARKETING AUTHORISATION NUMBER(S)**

PL 28176/0184

**9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

17/07/2017

**10 DATE OF REVISION OF THE TEXT**

17/07/2017