PRESCRIBING INFORMATION

PegLyte® Powder
Polyethylene Glycol 3350 and Electrolytes for Oral Solution, USP

Gastrointestinal lavage and laxative

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PegLyte® Powder

Polyethylene Glycol 3350 and Electrolytes for Oral Solution, USP

PART I: HEALTH PROFESSIONAL INFORMATION

SUMMARY PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Route of Administration</th>
<th>Dosage Form / Strength</th>
<th>Clinically Relevant Nonmedicinal Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Powder for oral solution</td>
<td>Fruit flavours, Sodium Saccharin</td>
</tr>
<tr>
<td></td>
<td>70 g sachet 280 g bottle</td>
<td></td>
</tr>
<tr>
<td>PEG 3350</td>
<td>59.55 g 238.18 g</td>
<td></td>
</tr>
<tr>
<td>sodium sulphate</td>
<td>5.74 g 22.96 g</td>
<td></td>
</tr>
<tr>
<td>sodium bicarbonate</td>
<td>1.69 g 6.76 g</td>
<td></td>
</tr>
<tr>
<td>sodium chloride</td>
<td>1.46 g 5.85 g</td>
<td></td>
</tr>
<tr>
<td>potassium chloride</td>
<td>0.76 g 3.05 g</td>
<td></td>
</tr>
</tbody>
</table>

INDICATIONS AND CLINICAL USE

Adults

PegLyte Powder (PEG 3350 and Electrolytes) is indicated for:
- bowel cleansing prior to colonoscopy or barium enema x-ray examination or surgical procedures requiring a clean colon.
- the treatment of constipation

CONTRAINDICATIONS

PegLyte is contraindicated in patients with:
- ileus
- gastric retention
- bowel perforation
- gastrointestinal obstruction
- toxic colitis
- toxic megacolon
- hypersensitivity to this drug or to any ingredient in the formulation or component of the container. For a complete listing, see the Dosage Forms, Composition and Packaging section of this prescribing information.
WARNINGS AND PRECAUTIONS

General
- Use of PegLyte is not recommended when abdominal pain, nausea, or vomiting are present
- Unconscious or semiconscious patients should be observed during the administration of PegLyte via nasogastric tube.
- A laxative should not be taken within 2 hours of another medicine because the desired effect of the other medicine may be reduced.

For use in the treatment of constipation:
- Patients presenting with complaints of constipation should have a thorough medical history and physical examination to detect associated metabolic, endocrine and neurogenic conditions, and medications. A diagnostic evaluation should include a structural examination of the colon.
- Do not take PegLyte for more than 1 week, unless recommended by a physician.
- The safety of long term use of PEG plus electrolytes, like PegLyte, is unknown.

No additional flavorings or ingredients may be added to the solution.

Gastrointestinal
PegLyte should be used with caution in patients with ulcerative colitis (UC). Patients suffering from UC or from an acute exacerbation of inflammatory bowel disease have not been studied.

Patients with impaired gag reflex and patients prone to regurgitation or aspiration should be observed during the administration of PegLyte, especially if it is administered via nasogastric tube. If gastrointestinal obstruction or perforation is suspected, appropriate studies should be performed to rule out those conditions before administration of PegLyte.

When a large volume of PegLyte is used for colon preparation, if a patient experiences severe bloating, distension or abdominal pain, administration of the solution should be slowed or temporarily discontinued until the symptoms subside.

When used for the treatment of constipation, if diarrhea occurs, the use of PegLyte should be discontinued.

Immune
Cases of urticaria, rhinorrhea, dermatitis and anaphylactic reactions have been reported with PEG-based products which may represent allergic reactions.

Neurologic
Use of a 4 L volume of PEG-based colon preparation products has resulted in reports of generalized tonic-clonic seizures in patients with no prior history of seizures. Electrolyte abnormalities, such as hyponatremia and hypokalemia, as well as severe vomiting and excessive beverage consumption have been associated with these cases. A correction of fluid and electrolyte abnormalities resolved the neurologic irregularity. Therefore, in patients with known or suspected hyponatremia, or in patients using concomitant medications that increase the risk of electrolyte abnormalities (such as diuretics), PegLyte should be used with caution. In these
patients, baseline and post-colonoscopy laboratory tests (sodium, potassium, calcium, creatinine, and BUN) should be monitored.

**Renal**
The close monitoring of patients with impaired renal function should be performed, especially if severe vomiting occurs. Measurement of electrolytes (sodium, potassium, calcium,) and BUN and creatinine is desirable. Mild hypokalemia was reported in a patient treated for constipation during 1 month who concurrently received diuretics. Hyperphosphatemia was reported during long term treatment with PEG-products.

**Special Populations**

**Pregnant Women:** Animal reproduction studies have not been conducted with PegLyte, and it is also not known whether PegLyte can affect reproductive capacity or harm the fetus when administered to a pregnant patient. PegLyte should be given to a pregnant patient only if clearly needed.

**Nursing Women:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when PegLyte is administered to a nursing woman.

**Pediatrics:** Safety and effectiveness of PegLyte in children have not been established.

**Geriatrics (> 60 years of age):** There are isolated reports of serious post-marketing events following the administration of large volumes of PEG-based products for colon preparation in patients over 60 years of age (acute pulmonary edema after vomiting and aspirating the PEG-based solution, asystole, esophageal perforation, and upper GI bleeding from a Mallory-Weiss tear).

Caution is required in patients with renal and cardiac dysfunction in whom fluid and electrolyte shifts are more risky.

**Monitoring and Laboratory Tests**

Repeated or prolonged use of PEG-based products may result in electrolyte imbalance; monitoring of serum electrolytes including phosphate level is advised.

**ADVERSE REACTIONS**

**Adverse Drug Reaction Overview**

The most frequent adverse reactions, occurring in up to 50% of patients taking 4 L of PegLyte solution, are nausea, abdominal fullness and bloating. Abdominal cramps, vomiting and anal irritation occur less frequently. These adverse effects are transient.
The most frequent adverse reactions occurring in up to 48% of patients taking the split 4 L dose (2L in the evening and 2 L in the morning) of PegLyte are abdominal cramps, bloating, nausea, vomiting, insomnia (from frequent bathroom trips) and headache.

The adverse reactions occurring with PEG products used in the treatment of constipation include: nausea, abdominal bloating, cramping, diarrhea and/or gas. High doses may produce diarrhea and excessive stool frequency, particularly in elderly nursing home patients.

**Post-Market Adverse Drug Reactions**

The following rare adverse events have been reported following administration of 4 L of Peglyte:

*Cardiovascular*: bradycardia, acute pulmonary edema, hypotension

*Eye*: sensitivity to light, painful irritated eyes

*Gastrointestinal*: rectal bleeding (occult blood in stool), sores in mouth

*General and Administration Site Conditions*: chills, loss of appetite

*Hematologic*: anemia

*Metabolism and Nutrition*: fluid imbalance, hypoglycaemia

*Musculoskeletal and Connective Tissue*: muscle pain

*Nervous System*: headaches, unconscious, coma, seizures, shakes

*Psychiatric*: confused feeling, disorientation

*Respiratory, Thoracic and Mediastinal*: aspiration

*Skin and Subcutaneous Tissue*: oily hair and skin, facial swelling, leg swelling

Isolated cases of urticaria, rhinorrhea and dermatitis have been reported which may represent allergic reactions.

The use of large volume (4 L) PEG-based colon preparations has resulted in reports of generalized tonic-clonic seizures (see *Warnings and Precautions*).

**DRUG INTERACTIONS**

**Drug-Drug Interactions**

PegLyte, as any other laxatives, should not be taken within two (2) hours of another medicine because the desired effect of the other medicine may be reduced.
**Drug-Food Interactions**

When PegLyte is used for a bowel preparation, no food, except clear liquids, should be taken at least 3 hours prior to administration.

**DOSAGE AND ADMINISTRATION**

**Reconstitution of the Solution**

**PegLyte Powder (280 g bottle):** To prepare PegLyte solution, add tap water to the fill line (total volume 4 L). Replace cap tightly and mix well until all ingredients have dissolved.

**PegLyte Powder (70 g sachet):** Dissolve the entire contents of one sachet in 1 L (32 ounces) of water and stir rapidly to dissolve.

Patients should be instructed not to add any other ingredient (such as flavors, juice, etc) than the recommended quantity of water. Refrigerate the solution as chilling improves the taste. Using a straw can help to make the solution more palatable and easier to drink.

**Recommended Dose and Dosage Adjustment**

**Prior to gastrointestinal examination or procedure:**

On the day before the procedure, the patient should be instructed to have breakfast no later than 11h00 AM or as specified by the doctor. After breakfast, no solid foods or milk, except clear liquids, should be taken. Solid foods and milk can be reintroduced after the examination or procedure. PegLyte can be administered orally or by nasogastric tube.

**Oral:** PegLyte can be administered either in a full-dose or in a split-dose regimen. Recent data suggest that the split-dose method of administration may be more effective and better tolerated.

**Administration:**

<table>
<thead>
<tr>
<th></th>
<th>The day before the procedure</th>
<th>The day of the procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-dosing regimen*</td>
<td>In the evening**, rapidly drink a glassful (250 mL) of PegLyte every 10-15 minutes until 4 L are consumed.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Split-dosing regimen*</td>
<td>In the afternoon**, rapidly drink a glassful (250 mL) of PegLyte every 10-15 minutes until 2 L are consumed.</td>
<td>In the morning**, rapidly drink a glassful (250 mL) of PegLyte every 10-15 minutes until 2 L are consumed (must be finished at least 4 hours before procedure).</td>
</tr>
</tbody>
</table>

* Instructions must be followed as prescribed by the physician. Physicians may choose to prescribe a full-dosing or split-dosing regimen.

**Time to be confirmed by the physician.**
Nasogastric Tube: PegLyte is administered at a rate of 20 to 30 mL/minute (1.2 to 1.8 L/hour).

The first bowel movement should occur approximately 1 hour after beginning PegLyte administration. Administration of PegLyte should be continued until the fecal discharge is clear. Lavage is usually complete after the ingestion of 3 to 4 L of PegLyte solution. The unused portion should be discarded. A 1-hour waiting period after the appearance of clear liquid stools should be allowed prior to examination to complete bowel evacuation.

Constipation:
240 to 480 mL/day (equivalent to a PEG dose of 14 to 28 g/day, plus electrolytes) orally for a week or less, or as recommended by a physician. Do not take any type of laxatives for more than one week, unless your physician has ordered a special schedule for you.

Treatment for two to four days may be required to produce a bowel movement. If no bowel movement is achieved after 4 days, patients should consult their physicians.

OVERDOSAGE
There are no specific antidotes that are required to be administered in the event of overdose; however, supportive care may be required in order to prevent dehydration and/or electrolyte imbalance.

For management of a suspected drug overdose, contact your regional Poison Control Centre immediately.

ACTION AND CLINICAL PHARMACOLOGY

Mechanism of Action
Polyethylene glycol 3350 (PEG 3350) is an osmotic laxative which causes water to be retained with the stool leading to decreased stool consistency, softening the stools, increasing fecal bulk and facilitating bowel movements.

Large volume (about 4 L) of PegLyte (PEG 3350 and electrolytes) cleanses the bowel by induction of diarrhea.

The osmotic activity of PEG 3350, in combination with the electrolyte concentration, results in virtually no net absorption or secretion of ions, such as sodium or potassium, and water. Accordingly, large volumes may be administered over a short period of time without significant changes in fluid and electrolyte balance.

Smaller volumes of PegLyte are used for constipation relief. It may take about 2 to 4 days to produce a bowel movement.
**Pharmacokinetics**
PEG 3350 is poorly absorbed through the gastrointestinal tract, and not is metabolized by the colonic bacteria.

Pharmacokinetics of PEG 3350 were evaluated in human volunteers after the oral administration of 17 g doses (as a laxative). Results show minimal absorption (<0.28%), low blood levels, rapid excretion through feces and lack of substantial accumulation of PEG 3350 on multiple dosing regardless of age and gender.

**STORAGE AND STABILITY**

**PegLyte Powder for oral solution**
Store the sachets and bottle at room temperature, between 15°C and 30°C. Once reconstituted, the solution should be used within 48 hours after mixing if stored at room temperature. If kept refrigerated (between 2°C and 8°C), use within 30 days. Discard unused portion.

**DOSAGE FORMS, COMPOSITION AND PACKAGING**

**PegLyte Powder for oral solution (Fruit flavored)**

**280 g bottle**
Each 280 g bottle of PegLyte powder, to be dissolved in 4 L of water, contains the following medicinal ingredients:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene Glycol 3350</td>
<td>238.18 g</td>
</tr>
<tr>
<td>Sodium Sulphate</td>
<td>22.96 g</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>6.76 g</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>5.85 g</td>
</tr>
<tr>
<td>Potassium Chloride</td>
<td>3.05 g</td>
</tr>
</tbody>
</table>

Non-medicinal ingredients: Sodium Saccharin and Fruit flavours.

**Box of 4 x 70 g sachets**
Each 70 g sachet of PegLyte powder, to be dissolved in 1 L of water, contains the following medicinal ingredients:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene Glycol 3350</td>
<td>59.55 g</td>
</tr>
<tr>
<td>Sodium Sulphate</td>
<td>5.74 g</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>1.69 g</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>1.46 g</td>
</tr>
<tr>
<td>Potassium Chloride</td>
<td>0.76 g</td>
</tr>
</tbody>
</table>

Non-medicinal ingredients: Sodium Saccharin and Fruit flavours.
Once reconstituted with the appropriate volume of water, the solution contains:

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene Glycol 3350</td>
<td>17.8 mmol /L</td>
</tr>
<tr>
<td>Sodium</td>
<td>126.0 mmol /L</td>
</tr>
<tr>
<td>Potassium</td>
<td>10.2 mmol /L</td>
</tr>
<tr>
<td>Chloride</td>
<td>35.3 mmol /L</td>
</tr>
<tr>
<td>Sulphate</td>
<td>40.4 mmol /L</td>
</tr>
<tr>
<td>Bicarbonate</td>
<td>20.1 mmol /L</td>
</tr>
</tbody>
</table>

The osmolarity of a prepared solution of PEG/Electrolytes ranges from 235-305 mOsmol.
## PART II: SCIENTIFIC INFORMATION

### PHARMACEUTICAL INFORMATION

#### Drug Substance

<table>
<thead>
<tr>
<th>Drug Substance</th>
<th>Polyethylene Glycol 3350</th>
<th>Sodium Sulphate</th>
<th>Sodium Bicarbonate</th>
<th>Sodium Chloride</th>
<th>Potassium Chloride</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper name:</td>
<td>Polyethylene glycol</td>
<td>Sodium sulfate</td>
<td>Sodium bicarbonate</td>
<td>Sodium chloride</td>
<td>Potassium chloride</td>
</tr>
<tr>
<td>Chemical name:</td>
<td>Ethanol, 2,2'-(oxybis(2,1-ethanediol)bis-</td>
<td>Bisodium sulfate; Dibasic sodium sulfate</td>
<td>Bicarbonate of soda; Carbonic acid, monosodium salt</td>
<td>Sodium chloride</td>
<td>Potassium chloride</td>
</tr>
<tr>
<td>Molecular formula:</td>
<td>HO(C₂H₄O)ₙH</td>
<td>Na₂SO₄</td>
<td>NaHCO₃</td>
<td>NaCl</td>
<td>KCl</td>
</tr>
<tr>
<td>Structural formula:</td>
<td><img src="image" alt="Structural formula" /></td>
<td><img src="image" alt="Structural formula" /></td>
<td><img src="image" alt="Structural formula" /></td>
<td><img src="image" alt="Structural formula" /></td>
<td><img src="image" alt="Structural formula" /></td>
</tr>
</tbody>
</table>
CLINICAL TRIALS

A randomized, double-blind controlled clinical study compared the bowel cleansing efficacy and safety of a PEG electrolyte solution (PEG-E), which is similar to Peglyte, administrated in a full-dose regimen or a split-dose regimen with or without tegaserod (Abdul-Baki H. et al., 2008). Efficacy of colon cleansing was the primary outcome. In the study groups (Group A and Group C) where tegaserod was not used, patients were allowed a liquid diet in the full-dose group (Group A) or a regular diet in the split-dose group (Group C) with the last meal at 6:00 PM on the day before the colonoscopy, and after which only water was allowed until the procedure for both groups. Between 7:00 PM and 9:30 PM on the day before the procedure, patients in the full-dose group and the split-dose group consumed 4L or 2L of the PEG-E solution, respectively. Patients in the split-dose group consumed further 2L of the PEG-E solution 2 hours before the procedure. The quality of bowel preparation was graded as being excellent, good, fair or poor.

Patients in the split-dose group had significantly better colon cleansing than those in the full-dose group (86% vs 46.1%). The rate of patients who adhered to dose requirement was higher in the split-dose group than that in the full-dose group (91% vs 68.8%, P<0.05) (Table 1). The reported adverse events (AEs) were nausea, vomiting, abdominal cramps, headache, sleep disturbance and bloating in both study groups. However, the rate of the AEs was lower in the split-dose group than that in the full-dose group except bloating (Table 1).

Table 1 Comparison of bowel cleansing efficacy, patients’ compliance and adverse reactions of a 4 L PEG-E solution administrated in a full-dose regimen or a split-dose regimen (Abdul-Baki H. et al., 2008)

<table>
<thead>
<tr>
<th>4L PEG-E solution</th>
<th>Full-dose group (n=89)</th>
<th>Split-dose group (n=107)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with good or excellent bowel cleansing quality (%)*</td>
<td>46.1</td>
<td>86.0</td>
<td>-</td>
</tr>
<tr>
<td>Patients adhered to required volume of the PEG-E solution (%)**</td>
<td>68.8</td>
<td>91.0</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Adverse reactions (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nausea</td>
<td>49.4</td>
<td>28.0</td>
<td>-</td>
</tr>
<tr>
<td>Vomiting</td>
<td>7.9</td>
<td>4.7</td>
<td>-</td>
</tr>
<tr>
<td>Abdominal cramps</td>
<td>28.1</td>
<td>18.7</td>
<td>-</td>
</tr>
<tr>
<td>Headache</td>
<td>30.7</td>
<td>20.6</td>
<td>-</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>23.6</td>
<td>16.0</td>
<td>-</td>
</tr>
<tr>
<td>Bloating</td>
<td>25.0</td>
<td>35.5</td>
<td>-</td>
</tr>
</tbody>
</table>

*The bowel cleansing quality was rated with a scoring system similar to the Boston Bowel Preparation Score system.
** Independent of the use of tegaserod.

Constipation

Polyethylene glycol and electrolytes solutions (PEG-ELS) are described as part of the medications commonly used for the treatment of constipation. The maximal recommended dose is 17-36 g once or twice a day.
Study demographics and trial design

Table 4- Summary of patient demographics for clinical trials of polyethylene glycol and electrolyte solutions (PEG-ELS) in the treatment of chronic constipation

<table>
<thead>
<tr>
<th>Study</th>
<th>Trial design</th>
<th>Dosage</th>
<th>Duration</th>
<th>Study subjects</th>
<th>Mean age (years)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andorsky and Goldner</td>
<td>Double-blind, placebo-controlled, cross-over study</td>
<td>• PEG-ELS 240 mL/day or 480 mL /day or placebo 240 mL/day or 480 mL /day</td>
<td>2 x 5 days</td>
<td>32</td>
<td>62 (range 42-89)</td>
<td>7 M 25 F</td>
</tr>
<tr>
<td>Chaussade and Minic</td>
<td>Prospective, multicenter, double-blind, randomized, parallel-group study</td>
<td>• PEG3350-ELS 5.9 g/day or PEG3350-ELS 11.8 g /day or PEG4000 10 g/day or PEG4000 20 g/day</td>
<td>1 month</td>
<td>266</td>
<td>52.2 ± 18.5</td>
<td>39 M 227 F</td>
</tr>
<tr>
<td>Attar et al.</td>
<td>Randomized, open-label, parallel-group, multicenter study</td>
<td>• PEG-ELS 2x13g/day or Lactulose 2x10g/day After two weeks of treatment, patients could adjust their dose to 1 to 3 doses per day.</td>
<td>1 month</td>
<td>115</td>
<td>55 (24)</td>
<td>21 M 94 F</td>
</tr>
</tbody>
</table>

Study results

A double-blind, placebo-controlled, cross-over study by Andorsky and Goldner assessed the effectiveness of a PEG-ELS for the treatment of chronic constipation. 32 patients were instructed to drink 240 mL or 480 mL of PEG-ELS or placebo daily during 5 consecutive days, then received the same volume of the second treatment (PEG-ELS or placebo) after a 2-day washout period. Daily number of bowel movements and stool consistency were recorded. The two-factor analysis of variance results confirmed that PEG-ELS was superior to placebo with regard to the mean stool frequency (7.75 ± 4.55 vs. 4.88 ± 2.62, p < 0.01) and the mean stool consistency (2.56 ± 1.17 vs. 1.91 ± 0.94, p < 0.05). Furthermore, PEG-ELS 480 mL per day was superior to all other groups with regard to the measured variables. Side effects reported with the PEG-ELS solution included cramping, gas, nausea, and loose stools; side effects did not lead to treatment cessation. The finding that PEG-ELS resulted in significant effects on both stool frequency and stool consistency further supports its efficacy in the treatment of constipation.

A multicentre, double-blind, randomized, parallel-group study by Chaussade and Minic compared the efficacy and tolerability of standard and maximum daily doses of PEG-ELS (PEG 3350 and electrolytes) and PEG 4000 in the treatment of chronic constipation. Results showed that both doses of PEG-ELS and PEG 4000 were similarly effective in treating the symptoms of constipation (stool frequency and stool consistency were improved when compared to baseline). Diarrhea was observed in 13% of patients treated with low dose of PEG-ELS and 36% after the higher dose. Side effects reported were abdominal distention, flatulence and abdominal pain similarly distributed across all groups. Vital signs were normal in 95% of the patients.

A randomized, open-label, parallel-group, multicenter study by Attar et al. compared PEG-ELS to lactulose for treatment of constipation. 115 patients with chronic idiopathic constipation were
instructed to take two 13 g sachets of PEG-ELS or two 10 g lactulose sachets, in divided doses. After two weeks of treatment, dosage could be adjusted to 1 to 3 sachets/day. Treatment lasted for 4 weeks. PEG was well tolerated in the young and elderly population and the treatment of constipation was better than lactulose in terms of number of bowel movements, straining and use of suppositories and minienemas.

**TOXICOLOGY**

**Acute Toxicity:**

The oral LD<sub>50</sub> is >50 g/kg in mice, rats and rabbits.

**Rats**

Chronic oral toxicity studies were conducted in rats (up to 6 g/kg/day) up to six months duration. The major target organ of toxicity in the rat appeared to be the kidney (focal or multi focal cytoplasmic vacuolation in cortical tubular epithelial cells in males at 6 g/kg/day).

**Dogs**

Chronic oral toxicity studies were conducted in dogs (up to 3 g/kg/day) up to nine months duration.

Following oral administration of PEG 3350 for 28-days, the target organs of toxicity appeared to be the lungs (minimal to moderate interstitial fibrosis characterized by thickening of alveolar septa with associated pneumocyte hypertrophy/hyperplasia and the presence of a small number of mononuclear inflammatory cells and alveolar histiocytes; foamy or vacuolated histiocytes in perivascular or peribronchiolar regions characterized as perivascular mononuclear infiltrates), gastrointestinal tract (minimal subacute inflammation or crypt abscesses, hemorrhage and lymphoid hyperplasia in cecum, colon, ileum and/or rectum; lymphoid hyperplasia of the gut-associated lymphoid tissue in females at 3, 6 and 9.3 g/kg/day), testes (hypospermia in the epididymides and seminiferous tubule degeneration or multinucleated spermatids of the testes) and salivary gland (atrophy).

Following 9-month oral administration of PEG 3350 in dogs (up to 3 g/kg/day), the target organs of toxicity appeared to be testes (retarded development) and prostate (lymphocyte infiltrate) in the males and mammary gland (glandular hyperplasia), liver (vacuolation) and gallbladder (lymphocyte infiltrate and epithelial hyperplasia) in females.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:**

**Carcinogenesis**

No tumorigenic effect was seen in mice and rats up to 6 g/kg/day. The carcinogenic potential of PEG 3350 has also been examined in CD-J mice (104 weeks) and Sprague Dawley rats (104 weeks).
**Mutagenesis**
PEG 3350 was negative in the Ames test. No clastogenic potential was shown in the chromosome aberration test with human peripheral blood lymphocytes. It was also negative in in vivo oral rat micronucleus test.

**Development and reproductive toxicity**
Reproduction studies with PEG 3350 have been performed in pregnant rats (oral doses up to 2 g/kg/day) and in pregnant rabbits (oral doses up to 2 g/kg/day) and have revealed no adverse effects on fertility or harm to the fetus.

In pre- and post-natal developmental study in rats up to 2 g/kg/day dose, PEG 3350 did not show any adverse effect on F1 postnatal survival, body weight, developmental landmarks, startle response, motor activity, learning and memory and reproductive performance, intrauterine growth and survival of F2 fetuses and external and developmental parameters of F2 fetuses.
REFERENCES


PART III: CONSUMER INFORMATION

**PegLyte® Powder**
Polyethylene Glycol 3350 and Electrolytes for Oral Solution, USP

This leaflet is part III of a three-part "Prescribing Information" published when PegLyte was approved for sale in Canada and is designed specifically for Consumers. This leaflet is a summary and will not tell you everything about PegLyte. Contact your doctor or pharmacist if you have any questions about the drug.

### ABOUT THIS MEDICATION

**What the medication is used for:**
- Bowel cleansing prior to examination (e.g., colonoscopy) or surgical procedures requiring a clean colon.
- The treatment of constipation following consultation with your doctor.

**What it does:**
The polyethylene glycol binds to the water and helps laxation. The electrolytes help maintain the salt balance in this process.

**When it should not be used:**
Do not take if you have any of the following conditions (ask your doctor if you are unsure):
- Ileus (blockage in the bowel)
- Gastric retention
- Bowel perforation
- Gastrointestinal obstruction
- Toxic colitis (inflamed large bowel with damage to the intestinal wall)
- Toxic megacolon (acute swelling of the large bowel)
- Or if you are hypersensitive (allergic) to any ingredient in this formulation (See What the non-medicinal ingredients are).

**What the medicinal ingredients are:**
- **70 g sachet**
  - Polyethylene Glycol 3350: 59.55 g
  - Sodium Sulphate: 5.74 g
  - Sodium Bicarbonate: 1.69 g
  - Sodium Chloride: 1.46 g
  - Potassium Chloride: 0.76 g
- **280 g bottle**
  - Polyethylene Glycol 3350: 238.18 g
  - Sodium Sulphate: 22.96 g
  - Sodium Bicarbonate: 6.76 g
  - Sodium Chloride: 5.85 g
  - Potassium Chloride: 3.05 g

**What the important non-medicinal ingredients are:**
- Sodium Saccharin, Fruit flavours.

**What dosage forms it comes in:**
- Powder for oral solution (fruit flavoured):
  - Box of 4 sachets of 70 g powder
  - Bottle of 280 g powder

### WARNINGS AND PRECAUTIONS

BEFORE you use PegLyte, talk to your doctor or pharmacist if:
- You have taken any other medication within 2 hours of when you plan to start taking PegLyte (you may be removing this medication from your gastrointestinal tract by taking the PegLyte).
- You have a history of electrolyte imbalance (e.g., hyponatremia) or are using diuretics.
- You have ulcerative colitis or any other inflammatory bowel disease (e.g., Crohn’s disease).
- You are pregnant or nursing.
- You have difficulty swallowing or have a pronounced gag reflex or are prone to vomiting.
- You have any allergies to this drug or its ingredients.

Talk to your doctor if you have kidney or heart problems or any tendency to regurgitate (bring up) food from your stomach into your esophagus or any tendency to accidentally inhale food or regurgitate food into the trachea (breathing tube to the lungs).

**Contact your doctor if the following occurs while taking PegLyte:**
- You develop severe bloating, abdominal pain or distension.
- Do not take this medication if you have abdominal pain, nausea or vomiting.

### INTERACTIONS WITH THIS MEDICATION

Oral medications taken within 2 hours of the start of administration of PegLyte may be flushed from the gastrointestinal tract and not absorbed.

Drug interaction studies have not been done for PegLyte.

### PROPER USE OF THIS MEDICATION

**Preparation of the solution:**
- **PegLyte 280 g bottle:** Add tap water to the fill line (total volume 4 L). Replace cap tightly and mix well until all ingredients have dissolved.
- **PegLyte 70 g sachet:** Dissolve the entire contents of one sachet in 1 L (32 ounces) of water and stir rapidly to dissolve. Repeat for the other 3 sachets, one at a time, as needed.
Do not add any other ingredients (e.g., flavouring, juice) to the solution. Keep refrigerated during treatment, for optimal storage and to improve the taste. Using a straw can help to make the solution taste better and easier to drink.

**Usual adult dose:**
**Colon cleansing before examination**
On the day before your procedure or examination, have breakfast no later than 11h00 AM or as specified by your doctor. After breakfast, no solid foods or milk, except clear liquids, should be taken. You can resume eating solid foods and milk only after your procedure or examination.

Dosing regimens your healthcare practitioner might prescribe:

### SPLIT-DOSING REGIMEN*

**Day before procedure:**
1. In the afternoon, rapidly drink a glassful (250 mL) of PegLyte every 10-15 minutes until 2 L are consumed.

**Day of the procedure (at least 4 hours before the procedure):**
2. Rapidly drink a glassful (250 mL) of PegLyte every 10-15 minutes until 2 L are consumed.

### FULL-DOSING REGIMEN*

**Day before procedure:**
1. In the evening**, rapidly drink a glassful (250 mL) of PegLyte every 10-15 minutes until 4 L are consumed.

**Day of the procedure (at least 4 hours before the procedure):**
2. Rapidly drink a glassful (250 mL) of PegLyte every 10-15 minutes until 4 L are consumed.

*Follow instructions as prescribed by your physician. Your physician may choose to prescribe a full-dosing or split-dosing regimen. **Time to be confirmed by your physician.

The first bowel movement should occur approximately 1 hour after the start of PegLyte administration. Administration of PegLyte should be continued until the watery stool is clear and free of solid matter. **Make sure to take the entire bowel preparation solution as instructed by your doctor.** This will help ensure that the colon will be optimally cleaned and minimize the need to reschedule your procedure.

**Constipation**
Drink 240 to 480 mL/day for a week or less or as recommended by your doctor. Do not take any type of laxatives for more than one week, unless your doctor has ordered a special schedule for you. Treatment for 2 to 4 days may be required to produce a bowel movement. If no bowel movement occurs in 4 days, contact your doctor.

**Overdose:**
In case of drug overdose, contact a health care practitioner, hospital emergency department or regional Poison Control Centre immediately, even if there are no symptoms.

**SIDE EFFECTS AND WHAT TO DO ABOUT THEM**

Like all medications, PegLyte can cause some side effects. You may not experience any of them. For most patients, these side effects are likely to be minor and temporary.

The most frequent side effects for a colon preparation (occurring in up to 50% of patients) are:
- nausea
- abdominal fullness
- bloating

Less frequent side effects include:
- abdominal cramps
- vomiting
- anal irritation

Seizures have also occurred in patients using PEG-based colon preparations.

For patients using PegLyte in the treatment of constipation, the side effects may include:
- nausea
- abdominal bloating
- cramping
- gas
- diarrhea. If diarrhea occurs, stop taking PegLyte.

Isolated cases of urticaria (hives), rhinorrhea (nasal discharge) and dermatitis (skin inflammation) have been reported. These may be signs of an allergic reaction. If you experience these symptoms, seek urgent medical attention.

This is not a complete list of side effects. For any unexpected effects while taking PegLyte, contact your doctor or pharmacist.

HOW TO STORE IT

Store the powder at room temperature (between 15 and 30°C). Keep out of reach and sight of children. Once reconstituted, the solution should be used within 48 hours after mixing if stored at room temperature. If kept refrigerated (between 2-8°C), use within 30 days. Discard unused portion.

REPORTING SUSPECTED SIDE EFFECTS

You can report any suspected adverse reactions associated with the use of health products to the Canada Vigilance Program by one of the following 3 ways:

Report online at www.healthcanada.gc.ca/medeffect
Call toll-free at 1-866-234-2345
Complete a Canada Vigilance Reporting Form and:
  - Fax toll-free to 1-866-678-6789, or
  - Mail to: Canada Vigilance Program
  Health Canada
  Postal Locator 0701E
  Ottawa, Ontario
  K1A 0K9

Postage paid labels, Canada Vigilance Reporting Form and the adverse reaction reporting guidelines are available on the MedEffect™ Canada Web site at www.healthcanada.gc.ca/medeffect.

NOTE: Should you require information related to the management of side effects, contact your health professional. The Canada Vigilance Program does not provide medical advice.