

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*

**22-102**

**LABELING**

## HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use CaloMist™ Nasal Spray safely and effectively. See full prescribing information for CaloMist Nasal Spray.

CaloMist Nasal Spray (cyanocobalamin, USP)  
Initial U.S. Approval: 1942

### INDICATIONS AND USAGE

CaloMist Nasal Spray is a vitamin B<sub>12</sub> indicated for:

- Maintenance of vitamin B<sub>12</sub> concentrations after normalization with intramuscular vitamin B<sub>12</sub> therapy in patients with vitamin B<sub>12</sub> deficiency who have no nervous system involvement (1.1)

Important Limitations of Use: CaloMist Nasal Spray has not been evaluated for the treatment of newly diagnosed vitamin B<sub>12</sub> deficiency (1.2).

### DOSAGE AND ADMINISTRATION

- One spray in each nostril daily (25 mcg per nostril, total daily dose 50 mcg) (2.1)
- One spray in each nostril twice daily for patients with an inadequate response to once daily dosing (2.1)

### DOSAGE FORMS AND STRENGTHS

- Nasal spray: 25 mcg cyanocobalamin, USP /0.1 mL (3)

### CONTRAINDICATIONS

- Sensitivity to cobalt, vitamin B<sub>12</sub>, or any component of this product (4)

### WARNINGS AND PRECAUTIONS

- Vitamin B<sub>12</sub> concentrations must be monitored. Patients with declining or abnormally low vitamin B<sub>12</sub> concentrations should be switched back to intramuscular vitamin B<sub>12</sub> injections (5.1)
- Effectiveness in patients with nasal pathology or with other concomitant intranasal drugs has not been determined. Use with caution (5.2)
- Cyanocobalamin causes optic nerve atrophy in patients with Leber's disease. Do not use (5.3)
- Anaphylaxis and angioedema have been reported with parenteral vitamin B<sub>12</sub> products (5.4)

### ADVERSE REACTIONS

The most common adverse reactions (> 4%) were rhinorrhea, nasopharyngitis, arthralgia, dizziness, headache, nasal discomfort, pain, bronchitis, and rash (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact Fleming Pharmaceuticals at 1-800-343-0164 or FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).

### USE IN SPECIFIC POPULATIONS

- Patients with vitamin B<sub>12</sub> deficiency and concurrent renal or hepatic disease may require increased doses or more frequent administration of vitamin B<sub>12</sub> therapy (8.6)

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling.

Revised: 7/2007

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\*Sections or subsections omitted from the full prescribing information are not listed.

## FULL PRESCRIBING INFORMATION

### 1 INDICATIONS AND USAGE

#### 1.1 Vitamin B<sub>12</sub> Deficiency

CaloMist Nasal Spray is indicated for maintenance of vitamin B<sub>12</sub> concentrations after normalization with intramuscular vitamin B<sub>12</sub> therapy in patients with vitamin B<sub>12</sub> deficiency who have no nervous system involvement.

#### 1.2 Important Limitations of Use

CaloMist Nasal Spray has not been evaluated for the treatment of newly diagnosed vitamin B<sub>12</sub> deficiency.

CaloMist Nasal Spray is not suitable for use in the vitamin B<sub>12</sub> absorption test (Schilling Test).

The effectiveness of CaloMist Nasal Spray in patients with nasal pathology (e.g., nasal congestion, allergic rhinitis, upper respiratory infections) has not been determined. Treatment with CaloMist Nasal Spray should be deferred until nasal symptoms have subsided [see *Warnings and Precautions* (5.2)].

### 2 DOSAGE AND ADMINISTRATION

#### 2.1 Recommended Dose

The recommended initial dose of CaloMist Nasal Spray is one spray in each nostril once daily (25 mcg per nostril, total daily dose 50 mcg). The dose should be increased to one spray in each nostril twice daily (total daily dose 100 mcg) for patients with an inadequate response to once daily dosing.

The dosing of CaloMist Nasal Spray and other intranasal medications should be separated by several hours, and these patients should have more frequent monitoring of vitamin B<sub>12</sub> concentrations because of the potential for erratic absorption.

#### 2.2 Priming (Activation) of Pump

The pump must be primed before the bottle is used for the first time. To prime the pump, place the nozzle between the first and second finger with the thumb on the bottom of the bottle. Pump the unit firmly and quickly then repeat this priming an additional 6 times for a total of 7 priming sprays. Now the nasal spray is ready for first-time use. If 5 or more days elapse since last use, the pump must be re-primed with two re-priming sprays.

Additional instructions are provided in the patient instruction sheet [see *Patient Counseling Information* (17.2)].

### 3 DOSAGE FORMS AND STRENGTHS

CaloMist Nasal Spray (cyanocobalamin, USP) is a solution of cyanocobalamin, USP, for administration as a metered spray to the nasal mucosa. Each bottle of CaloMist Nasal Spray contains 18 mL of a 25 mcg/0.1 mL solution of cyanocobalamin. The spray solution has a pH between 6.5 and 7.5. After initial priming, each spray delivers 25 mcg of cyanocobalamin. Each bottle will deliver 60 sprays for a total of thirty 50 mcg doses of CaloMist Nasal Spray.

### 4 CONTRAINDICATIONS

Sensitivity to cobalt, vitamin B<sub>12</sub>, or any component of this product [see *Warnings and Precautions* (5.4)].

### 5 WARNINGS AND PRECAUTIONS

#### 5.1 Laboratory Monitoring

Hematocrit, reticulocyte count, vitamin B<sub>12</sub>, folate, and iron levels should be obtained prior to treatment. All hematologic parameters, including vitamin B<sub>12</sub> concentrations, should be normal before initiating treatment with CaloMist Nasal Spray. Periodic monitoring of serum vitamin B<sub>12</sub> concentrations must be obtained to confirm adequacy of therapy. Vitamin B<sub>12</sub> concentrations and complete blood counts should be monitored one month after starting CaloMist Nasal Spray and then at 3 to 6 month intervals thereafter. Patients with borderline-low vitamin B<sub>12</sub> concentrations (<300 ng/L) should also undergo measurement of methylmalonic acid and homocysteine concentrations, which are more sensitive measures of vitamin B<sub>12</sub> deficiency in this setting.

Patients with declining or abnormally low vitamin B<sub>12</sub> concentrations despite maximal doses of CaloMist Nasal Spray should be switched back to intramuscular vitamin B<sub>12</sub> injections. Vitamin B<sub>12</sub> deficiency that is inadequately treated for longer than three months may produce irreversible neurological damage.

#### 5.2 Use in Patients With Nasal Pathology

CaloMist Nasal Spray has not been evaluated in patients with nasal pathology. Treatment with CaloMist Nasal Spray should be deferred until nasal symptoms have subsided. Patients with chronic-nasal symptoms or significant nasal pathology are not ideal candidates for intranasal vitamin B<sub>12</sub> therapy. If CaloMist Nasal Spray therapy is attempted in these patients, vitamin B<sub>12</sub> concentrations should be monitored more frequently than in patients without nasal pathology because of the potential for erratic or blunted absorption.

#### 5.3 Use in Patients with Leber's Disease

Patients with early Leber's disease (hereditary optic nerve atrophy) who were treated with cyanocobalamin suffered severe and swift optic atrophy. Cyanocobalamin should not be used in these patients.

#### 5.4 Anaphylaxis and Angioedema

Anaphylactic shock, death, and angioedema were not reported in the CaloMist Nasal Spray clinical trial but have been reported with parenteral vitamin B<sub>12</sub> administration.

#### 5.5 Megaloblastic Anemia

Megaloblastic anemia has many causes, including vitamin B<sub>12</sub> deficiency and folate deficiency. Folic acid may result in a hematological response in patients with vitamin B<sub>12</sub> deficiency, but will not prevent irreversible neurological manifestations. Vitamin B<sub>12</sub> is not an appropriate treatment for folate deficiency.

Hypokalemia, thrombocytosis, and sudden death may occur when severe megaloblastic anemia is treated intensely with vitamin B<sub>12</sub>. Serum potassium and the platelet count should be carefully monitored in this setting.

#### 5.6 Blunted Response to Vitamin B<sub>12</sub> Therapy

Infections, uremia, concurrent iron or folic acid deficiency, and drugs with bone marrow suppressant properties (e.g., chloramphenicol) may blunt the therapeutic response to vitamin B<sub>12</sub> products, including CaloMist Nasal Spray.

### 6 ADVERSE REACTIONS

#### 6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The data described below and in Table 1 reflect exposure in 25 subjects (age range 27-82 years; 17 women; 21 Caucasians) with vitamin B<sub>12</sub> deficiency (12 with pernicious anemia, 4 secondary to gastrointestinal surgery, 9 with unknown cause) who received CaloMist Nasal Spray 50 mcg daily for 8 weeks in an uncontrolled clinical trial. Prior to enrollment, all subjects were required to have normal vitamin B<sub>12</sub> levels with intramuscular vitamin B<sub>12</sub> injections. One patient who completed the study developed epistaxis on Day 12 of dosing and was noted to have irritation of the right nasal septum at study end. This patient had pre-existing allergic rhinitis and required a doubling of the CaloMist Nasal Spray dose during the last week of the study because of declining vitamin B<sub>12</sub> concentrations.

<b>Preferred Term</b>	<b>CaloMist Nasal Spray (N=25) n (%)</b>
Arthralgia	3 (12%)
Dizziness	3 (12%)
Headache	3 (12%)
Nasopharyngitis	3 (12%)
Rhinorrhea	3 (12%)
Bronchitis	2 (8%)
Nasal Discomfort	2 (8%)
Pain	2 (8%)
Rash	2 (8%)
Asthma	1 (4%)
Back Pain	1 (4%)
Cough	1 (4%)
Epistaxis	1 (4%)
Hypersomnia	1 (4%)
Influenza Like Illness	1 (4%)
Malaise	1 (4%)
Pharyngolaryngeal Pain	1 (4%)
Postnasal Drip	1 (4%)
Procedural Pain	1 (4%)
Pyrexia	1 (4%)
Scab	1 (4%)

Sinus Headache	1 (4%)
Sinusitis	1 (4%)
Tooth Abscess	1 (4%)

## 6.2 Experience with Parenteral Vitamin B<sub>12</sub>

The following adverse reactions have been reported with parenteral vitamin B<sub>12</sub>:

Generalized:	Anaphylactic shock and death
Cardiovascular:	Pulmonary edema and congestive heart failure early in treatment Peripheral vascular thrombosis
Hematological	Polycythemia vera
Gastrointestinal:	Mild transient diarrhea
Dermatological:	Itching; transitory exanthema

## 6.3 Postmarketing Experience

The following adverse reactions have been identified during postapproval use of cyanocobalamin. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

Angioedema and angioedema-like reactions [See *Warnings and Precautions* (5.4)]

## 7 DRUG INTERACTIONS

Most antibiotics, methotrexate, and pyrimethamine invalidate the vitamin B<sub>12</sub> diagnostic blood assays.

## 8 USE IN SPECIFIC POPULATIONS

### 8.1 Pregnancy

*Pregnancy Category C:* Animal reproduction studies have not been conducted with CaloMist Nasal Spray. Although vitamin B<sub>12</sub> is an essential vitamin and requirements are increased during pregnancy, it is not known whether CaloMist Nasal Spray can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. CaloMist Nasal Spray should be given to a pregnant woman only if clearly needed. Adequate and well-controlled studies have not been conducted in pregnant women.

### 8.3 Nursing Mothers

Although vitamin B<sub>12</sub> is an essential vitamin and requirements are increased during lactation, it is not known whether CaloMist Nasal Spray can cause harm to an infant when administered to a nursing woman. Vitamin B<sub>12</sub> appears in the milk of nursing mothers in concentrations that approximate the mother's vitamin B<sub>12</sub> blood level. Caution should be exercised when CaloMist Nasal Spray is administered to a nursing woman.

### 8.4 Pediatric Use

Because CaloMist Nasal Spray has not been studied in children, safety and effectiveness have not been established in pediatric patients.

### 8.5 Geriatric Use

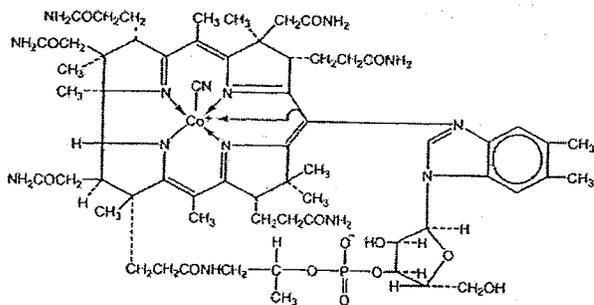
Clinical studies of CaloMist Nasal Spray did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences in responses between the elderly and younger patients. In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

### 8.6 Renal/Hepatic Impairment

Patients with vitamin B<sub>12</sub> deficiency and concurrent renal or hepatic disease may require increased doses or more frequent administration of vitamin B<sub>12</sub> therapy.

## 11 DESCRIPTION

Cyanocobalamin is a synthetic form of vitamin B<sub>12</sub> with activity equivalent to the endogenous form of vitamin B<sub>12</sub>. The chemical name is  $\alpha$ -(5,6-dimethylbenzimidazolyl) cyanocobamide. The cobalt content is 4.35%. The molecular formula is C<sub>63</sub>H<sub>88</sub>CoN<sub>14</sub>O<sub>14</sub>P, which corresponds to a molecular weight of 1355.4 and the following structural formula:



Cyanocobalamin occurs as dark red crystals, orthorhombic needles, or crystalline red powder and is very hygroscopic in the anhydrous form, and sparingly to moderately soluble in water (1:80). The pharmacologic activity of cyanocobalamin is destroyed by heavy metals (iron) and strong oxidizing or reducing agents (Vitamin C), but not by autoclaving for short periods of time (15-20 minutes) at 121°C. The vitamin B<sub>12</sub> coenzymes are very unstable in light.

Each bottle of CaloMist Nasal Spray contains cyanocobalamin, sodium chloride, sodium phosphate monobasic, benzyl alcohol, sodium hydroxide, and benzalkonium chloride in purified water with an attached spray pump unit.

## 12 CLINICAL PHARMACOLOGY

### 12.1 Mechanism of Action

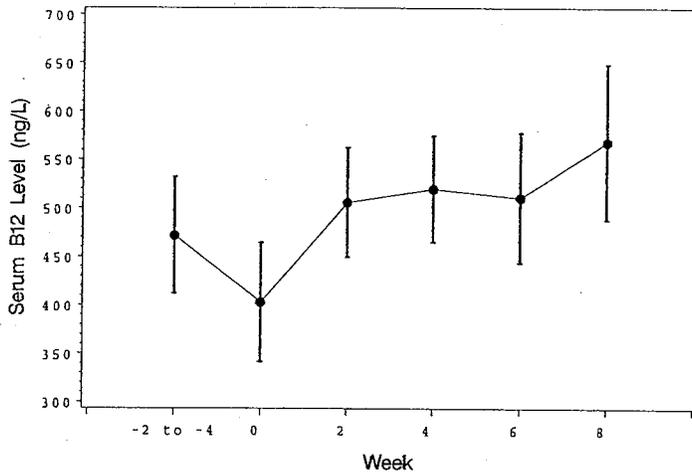
Vitamin B<sub>12</sub> is essential for growth, cell reproduction, hematopoiesis, and nucleoprotein and myelin synthesis. Rapidly dividing cells (e.g., epithelial cells, bone marrow, myeloid cells) have the greatest requirement for vitamin B<sub>12</sub>. In tissues, vitamin B<sub>12</sub> is essential for the conversion of methylmalonate to succinate and for the synthesis of methionine from homocysteine. In the absence of vitamin B<sub>12</sub>, tetrahydrofolate cannot be regenerated from 5-methyl tetrahydrofolate, and functional folate deficiency occurs. Vitamin B<sub>12</sub> also may be involved in sulfhydryl-activated enzyme systems associated with fat and carbohydrate metabolism and protein synthesis.

### 12.2 Pharmacodynamics

In 24 vitamin B<sub>12</sub> deficient patients who were stabilized on intramuscular (IM) vitamin B<sub>12</sub> therapy, once daily intranasal dosing with CaloMist Nasal Spray for 8 weeks resulted in serum vitamin B<sub>12</sub> concentrations that were within the target range (>200 ng/L) and slightly higher than those seen 2 to 4 weeks after administration of IM vitamin B<sub>12</sub> (see Figure 1 - average mean increase from Visit 1 to Visits 3-6 = 45 ng/L). Twenty-three of these 24 patients received 50 mcg of CaloMist Nasal Spray daily for the duration of the trial; the remaining patient required doubling of the CaloMist Nasal Spray dose from 50 mcg to 100 mcg daily during the last week of the study because of declining vitamin B<sub>12</sub> concentrations. One of the 25 patients dosed with CaloMist Nasal Spray was excluded from the efficacy analyses because a diagnosis of vitamin B<sub>12</sub> deficiency could not be confirmed.

Figure 1.

Mean Vitamin B<sub>12</sub> Serum Levels Over 8 Weeks of Intranasal (IN) Vitamin B<sub>12</sub> Dosing in 24 Subjects Stabilized on Intramuscular (IM) Vitamin B<sub>12</sub>



Notes:

- Weeks -2 to -4 correspond to 2 to 4 weeks post last IM injection
- CaloMist Nasal Spray was initiated at Week 0.
- Figure shows mean vitamin B<sub>12</sub> serum levels with 95% confidence intervals.

### 12.3 Pharmacokinetics

#### Distribution

In the blood, vitamin B<sub>12</sub> is bound to transcobalamin II (a specific B-globulin carrier protein) and is distributed to tissues and stored primarily in the liver and bone marrow.

#### Elimination

About 3-8 mcg of vitamin B<sub>12</sub> is secreted into the gastrointestinal tract daily via the bile. In subjects with sufficient intrinsic factor, all but about 1 mcg is reabsorbed. When vitamin B<sub>12</sub> is administered in doses that saturate the binding capacity of plasma proteins and the liver, the unbound vitamin B<sub>12</sub> is rapidly eliminated in the urine. Retention of vitamin B<sub>12</sub> in the body is dose-dependent.

### 13 NONCLINICAL TOXICOLOGY

#### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

There are no long-term studies in animals that have evaluated the carcinogenic potential of any of the vitamin B<sub>12</sub> products, including CaloMist Nasal Spray. There is no evidence from long-term use in patients with pernicious anemia that vitamin B<sub>12</sub> is carcinogenic. Pernicious anemia is associated with an increased incidence of carcinoma of the stomach, but this malignancy has been attributed to the underlying pathology of pernicious anemia and not to treatment with vitamin B<sub>12</sub>.

### 16 HOW SUPPLIED/STORAGE AND HANDLING

CaloMist Nasal Spray is available as a metered dose spray in 30 mL plastic bottles containing 18 mL of solution. CaloMist Nasal Spray is available in a dosage strength of 25 mcg cyanocobalamin, USP, per actuation (0.1 mL/actuation). CaloMist Nasal Spray is provided in a carton containing one bottle of nasal spray solution affixed with a nasal spray pump, a package insert, and a patient instruction sheet. One bottle delivers thirty 50 mcg doses (60 sprays) (NDC 0256-0203-01).

#### Storage

Protect from light. Store upright at a controlled temperature of 15 to 30°C (59 to 86°F).  
Protect from freezing.

### 17 PATIENT COUNSELING INFORMATION

[See FDA-approved Patient Labeling (17.2)]

### 17.1 Important Information for Patients

Patients with a chronic underlying cause of vitamin B<sub>12</sub> deficiency will require indefinite administration of a vitamin B<sub>12</sub> product, such as CaloMist Nasal Spray. Noncompliance or inadequate treatment with vitamin B<sub>12</sub> therapy may result in recurrence of anemia and the development or worsening of irreversible neurological damage.

The dosing of CaloMist Nasal Spray and other intranasal medications should be separated by several hours.

Vitamin B<sub>12</sub> concentrations should be monitored one month after CaloMist Nasal Spray initiation or dose change and every 3-6 months thereafter.

Careful instructions on the priming of the actuator and nasal administration of CaloMist Nasal Spray should be given to the patient, and the procedures for use should be demonstrated.

### 17.2 Patient Instruction Sheet

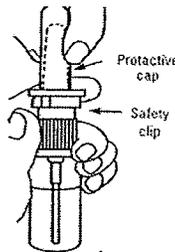
**Instructions for Using CaloMist Nasal Spray. Read the following instructions carefully before using CaloMist Nasal Spray.**

- Use CaloMist Nasal Spray as directed by your doctor.

**NOTE: CaloMist Nasal Spray is prefilled to give 30 doses (60 sprays of medicine). One dose is one spray in each nostril once a day.**

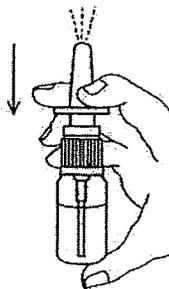
**CaloMist Nasal Spray Pump Priming:** Before you use the medicine for the first time the nasal spray pump unit must be readied (primed).

Diagram 1



1. Hold the nasal spray bottle upright with your index finger on top of one of the two arms of the pump. Remove the clear protective cap from the top of the nozzle. (See Diagram 1)
2. Remove the safety clip from the nasal spray pump. (See Diagram 1)

Diagram 2



3. While holding the nasal spray bottle upright with your index and middle fingers on the two side arms of the pump, and your thumb on the bottom of the bottle, press the arms down firmly and quickly. (See Diagram 2)
4. Repeat Step 3, 6 more times for a total of 7 priming sprays. You should see a full spray of medicine with the 7<sup>th</sup> priming spray. (See Diagram 2)

**NOTE: You must prime CaloMist Nasal Spray with two re-priming sprays if you do not use for five days or more.**

**Your CaloMist Nasal Spray is now ready to use.**

Diagram 3



1. Blow your nose gently to clear both nostrils. (See Diagram 3)
2. Hold the nasal spray bottle upright with your first and second fingers on the two side arms of the pump, and your thumb on the bottom of the bottle. (See Diagram 4)
3. Gently insert the nasal spray pump to one nostril (about ½ inch), pointing the tip towards the back of the nose. (See Diagram 4)

Diagram 4



4. With your other hand (the one not holding the bottle) use a finger to gently push close your other nostril (the one without a spray pump inserted). (See Diagram 4)
5. Tilt your head forward and press the arms of the nasal spray bottle down firmly and quickly.
6. Sniff in gently during and right after a spray and return your head to an upright position. Repeat these steps for the other nostril.
7. Wipe the nozzle of the nasal spray pump with a clean tissue after use. Replace the safety clip and clear cover on the nasal spray pump.
8. Store CaloMist Nasal Spray upright at room temperature, 59 to 86° F (15 to 30° C). Do not freeze.

**Discard CaloMist Nasal Spray after 30 doses (60 sprays).**

1. Unscrew the cap, rinse the bottle and pump assembly under a water faucet.
2. Dispose of all parts in a trashcan.

**Keep CaloMist Nasal Spray and all medicines out of the reach of children.**

**Fleming**  
PHARMACEUTICALS

Manufactured by:  
Fleming Pharmaceuticals  
Fenton, MO 63026 USA  
calomist@flemingcompany.com  
1-800-343-0164

Rx Only      NDC 6256-0203-01

**Calomist**  
Nasal Spray  
(cyanocobalamin, USP)

25 mcg/spray  
18 mL (60 sprays)

FOR NASAL USE ONLY  
Keep out of reach of children.

Ingredients: Each 0.1 mL contains 25 mcg Cyanocobalamin USP and the following inactive ingredients: Sodium Chloride USP, Sodium Phosphate Monobasic USP, Benzyl Alcohol NF, Sodium Hydroxide NF, Benzalkonium Chloride NF and Purified Water USP.

Lot No. \_\_\_\_\_  
Exp. Date \_\_\_\_\_

Store upright at controlled room temperature, 15°-30° C (59°-86° F).  
Usual Dosage: See package insert for complete prescribing information.  
See enclosed instructions for use.  
Protect from light and freezing.  
L273 REV. 0707

**Helmuth**  
Pharmaceuticals, Inc.  
St. Louis, County, MO 63046 USA  
Equally Effective Spray, a trademark of Helmuth Pharmaceuticals.

3 02580 20301 4

18 mL (60 sprays)  
25 mcg/spray  
Nasal Spray  
Calomist<sup>™</sup>  
(cyanocobalamin, USP)

**Patient Dosing Instructions:**

NOTE: If you have not used Calomist<sup>™</sup> Nasal Spray for 5 or more days, you must prime it with 2 sprays before use.



FIG 1

1. Blow your nose gently to clear both nostrils. (FIG 1)

2. Hold the nasal spray bottle upright. Place your first and second fingers on the 2 side arms of the pump. Place your thumb on the bottom of the bottle. (FIG 2)

3. Gently insert the nasal spray pump into one nostril (about half an inch), pointing the tip towards the back of your nose. (FIG 2)

4. With your other hand (the one not holding the bottle), use a finger to gently push closed your other nostril (the one without a spray pump inserted). (FIG 2)

5. Tilt your head forward. Firmly and quickly press down the arms of the nasal spray bottle.

6. Sniff gently (blowing and sniffing after the spray). Return your head to an upright position.

7. Repeat these steps for the other nostril.

8. After use, wipe the nozzle of the nasal spray pump with a clean tissue. Replace the safety cap and clear cover on the nasal spray pump.

9. Store Calomist<sup>™</sup> Nasal Spray upright at room temperature, 59°F to 86°F (15°C to 30°C). Do not freeze.

Discard Calomist<sup>™</sup> Nasal Spray after 30 doses (60 sprays).

1. Unscrew the cap. Rinse the bottle and pump assembly under a water faucet.

2. Dispose of all parts in the trash.

Keep Calomist<sup>™</sup> Nasal Spray and all medicines out of the reach of children.

For more information, go to [www.flemingpharma.com](http://www.flemingpharma.com)

Calomist<sup>™</sup>  
Nasal Spray  
(cyanocobalamin, USP)

Storage: Store upright at controlled room temperature 15°-30° C (59°-86° F). See enclosed instructions for use. Protect from light and freezing.

Calomist Nasal Spray is a trademark of Fleming Pharmaceuticals.

0256-0303-01  
L261 REV. 0707

For Only

NDC 0256-0303-01

Calomist<sup>™</sup>  
Nasal Spray  
(cyanocobalamin, USP)

25 mcg/spray

18 mL (60 sprays)

FOR NASAL  
USE ONLY

Fleming  
PHARMACEUTICALS  
St. Louis County, MO 63026 USA

Keep out of reach of children.



L261 Bar code to come

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**This is a representation of an electronic record that was signed electronically and  
this page is the manifestation of the electronic signature.**  
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/s/

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Theresa Kehoe  
7/27/2007 10:28:30 PM  
Theresa Kehoe for Mary Parks