PROFESSIONAL INFORMATION: CONTENT UNDER EACH HEADING

- This product is Complementary Medicine (Category D33.7);
- and is identified according to its discipline as a Combination Product;
- which is not registered by the Authority.
- **This unregistered medicine has not been evaluated by the SAHPRA for its quality, safety, or intended use.**

SCHEDULING STATUS:

S0

1. NAME OF THE MEDICINE

Sinulex® Forte Fizzy Tablets

Strength

493.71 mg per tablet

Pharmaceutical form

Tablet, effervescent, dissolvable oral

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains:

L-ascorbic acid (Vitamin C)	300 mg
Echinacea angustifolia DC. Asteraceae (Echinacea) [Flower, 4:1 extract]	125 mg
Amoracia rusticana G. Gaertn. (Horseradish) [Root, 4:1 extract]	50 mg
Zinc gluconate Providing zinc (elemental) 2.4 mg	16.7 mg
Riboflavin (Vitamin B2)	2 mg
Cholecalciferol (Vitamin D3)	333 IU 8.33 µg

Excipients:

- Sodium bicarbonate ..... 80 mg
- Tartaric acid ..... 70 mg
- for a full list of excipients and the amounts of each excipient per tablet, see section 6.1

Contains sugar and sweetener:

- Isomalt ..... 140 mg
- Sucralose / Acesulfame K ..... 10 mg

3. PHARMACEUTICAL FORM

Tablet, effervescent, round, pale yellow, 25.5 mm diameter, no markings.

4. CLINICAL PARTICULAR

4.1. Therapeutic indications

- To support the immune system to deal with allergens, colds, flu, and sinusitis for better overall health.
- Due to the active substances, Sinulex® Forte Fizzy Tablets are indicated for therapeutic use only from the age of 6 years and older.
- These active substances are useful for symptomatic relief of sinus pressure, sinus congestion, post-nasal drip, colds, and flu symptoms, by supporting the respiratory and immune systems. Its active substances may also support the immune function of those who are asymptomatic as a low-risk health supplement and can be used to maintain healthy levels of Vitamin B2, Vitamin C, Vitamin D3, and Zinc.
- It is a health supplement that contains important immunomodulator and immunostimulant properties and can be used to support the respiratory tract, supporting the paranasal sinuses.
- Sinulex® Forte Fizzy Tablets are indicated for self-administration as a low-risk health supplement, although only a healthcare provider may indicate it as an adjunct treatment to an existing treatment regimen for individual persons.
- It is not indicated as an alternative therapy to replace conventional medicines or any other treatments prescribed by a healthcare provider.
- When using Sinulex® Forte Fizzy Tablets for maintenance therapy, it is specifically indicated for the purposes of maintaining healthy levels of its key ingredients and is not indicated for alternative maintenance therapy.
- It is not indicated as a cure-all or monotherapy for serious conditions because Sinulex® Forte Fizzy Tablets are not intended (nor indicated) to diagnose, treat, prevent, or cure diseases.
- It is strictly indicated for symptomatic relief as a low-risk supportive supplement.

4.2. Posology and method of administration

Posology

Single dose, 493.71 mg per tablet.

The potency of this medicine is expressed in tablet units. These units are not interchangeable with the units used to express the potency of other preparations that contain the same active substances. No more than the recommended dosage should be taken, and persons should not take or use a double dose to make up for forgotten individual doses.

Adolescents over the age of 12 years, adults, and the elderly

1 tablet, 3 times daily, each time dissolving the dose in a full glass of room-temperature water to ensure safe and appropriate intake. This is the maximum recommended daily and/or total dose.

Children above the age of 6 years

½ tablet, 3 times daily, each time dissolving the dose in a full glass of room-temperature water to ensure safe and appropriate intake. This is the maximum recommended daily and/or total dose.

Duration of use

If the symptoms persist longer than 1 week during the use of the medicinal product, a doctor or a qualified health care practitioner should be consulted.

Method of administration

Oral use only.

4.3. Contraindications

Allergic or hypersensitive to the active substances. Insufficient data is available to establish safety during pregnancy and lactation; avoid use. Those with autoimmune diseases or using prescription immunosuppressants should avoid using this medicine as it has immunostimulant effects. Based on an existing treatment regimen or pre-existing condition there may be other contraindications (see section 4.5 'Interaction with other medicines and other forms of interaction').

4.4. Special warnings and precautions

In the absence of sufficient data, the use during pregnancy and lactation is not recommended (see section 4.6 'Fertility, pregnancy, and lactation'). Sinulex® Forte Fizzy Tablets is not established as safe for use in persons younger than 6 years of age. Adequate care must be taken to keep this medicine out of the reach of children. Take special precautions for those with autoimmune diseases. In the absence of sufficient data, the use of this medicine by those with an autoimmune disease is not recommended.
The maximum recommended daily and/or total dose should not be exceeded. Sinulex® Forte Fizzy Tablets contains Echinacea that acts as an immunostimulant. Because of Echinacea, advise patients with autoimmune diseases such as multiple sclerosis (MS), systemic lupus erythematosus (SLE), rheumatoid arthritis (RA), pemphigus vulgaris, or others to avoid echinacea or else to use echinacea with caution. Those with autoimmune diseases should consult their healthcare practitioner before using medicines containing Echinacea.

4.5. Interaction with other medicines and other forms of interaction

Recommendations

The concomitant use of this medicine with another medicine that is an immunosuppressant is not recommended because of the immunostimulatory effect of this medicine. It is recommended that those who are already using prescription immunosuppressants and anticoagulants observe the contraindication of concomitant use and consult their healthcare provider before using this medicine.

Although this medicine is indicated for self-administration, and no other forms of interaction have been reported, it is still recommended that a healthcare provider be consulted to avoid patients making dose adjustments to an existing treatment regimen, where the risks may outweigh the benefits. We recommend caution for those with autoimmune diseases who may be relying on immunosuppressant medications.

4.6. Fertility, pregnancy and lactation

Although it is unlikely to affect fertility, there is no fertility data available. Safety during pregnancy and lactation has not been established. In the absence of sufficient data, the use during pregnancy and lactation is not recommended. No adverse effects on fertility, pregnancy, and lactation have yet been reported.

4.7. Effects on the ability to drive and use machines

Although it is unlikely to affect the ability to drive and use machines, no studies on the effect on the ability to drive and use machines have been performed. No adverse effects to the ability to drive or use machines have yet been reported.

4.8. Undesirable effect

No adverse reaction has been reported.

4.9. Overdose

No case of overdose has been reported.

5. PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic properties

Mechanism of action

Vitamin C is water-soluble vitamin that is commonly used due to its physiological functions. The applicable part of horseradish is the root. Zinc is a biologically essential trace element and is the second most abundant trace element in the body. The applicable parts of the three echinacea species used medicinally (Echinacea purpurea, Echinacea angustifolia, and Echinacea pallida) are the above-ground parts and the roots, and constituents of echinacea include alkamides such as dodeca-2E,4E,8Z,10Z(E)-tetraenoic acid isobutylamides, N-isobutyldodeca-2E,4E,8Z,10Z-tetraenamide, and undeca-2-ene-8,10-diynoic acid isobutylamide. Riboflavin is a water soluble B vitamin (vitamin B2) which is involved in vital metabolic processes and necessary for normal cell function, growth, and energy production. Cholecalciferol is synthesized in the skin via 7-dehydrocholesterol, a cholesterol precursor.

Pharmacodynamic effects

The pharmacodynamic effects of the active substances contained in the Combination Product of Sinulex® Forte Fizzy Tablets exhibit anti-allergic effects that are of interest regarding Vitamin C for allergies such as allergic rhinitis. There are antioxidant effects of Vitamin C which are congruent with its free-radical scavenging effects. The antihypertensive effects appear plausible as well as the anti-inflammatory effects of Vitamin C. Additionally, anti-sepsis effects are of interest due to Vitamin C.
Moreover, antibacterial effects are attributed to horseradish which has antimicrobial efficacy against Gram-negative and Gram-positive bacteria. Other cardiovascular effects are due to evidence that horseradish can stimulate local blood flow.
Through the anti-inflammatory effects of zinc theoretically associated with low levels of zinc during inflammation, supplementation may exhibit additional benefits. The antiviral effects are not clear, but it appears that zinc can inhibit rhinovirus replication in vitro, but it is unclear whether this happens in vivo. Because zinc plays an important role for neutrophils, natural killer cells, and T-lymphocyte function, it has additional immunomodulating effects that appear beneficial to overall health. The importance of zinc in supporting healthy vision is a key ocular effect.
Antibacterial effects are attributed to *Echinacea angustifolia* DC. Asteraceae flower extract due to its bactericidal potential, and antifungal compounds are also present. The anti-inflammatory effects of this flower extract is based on the lowering of serum ferritin which appears to indicate inflammatory cytokines, something which is lowered in people treated with echinacea. Antioxidant effects of the flower extract include free radical scavenging and the mechanism by which echinacea chelates transition metals, with antiviral effects that are exhibited against influenza virus, vesicular stomach virus, and herpes simplex virus, with further potential therapeutic applications to novel viruses. The flower extract also has immunostimulatory properties, thereby exhibiting an immunologic effect.
Vitamin D possesses further respiratory effects that may be beneficial and there is interest in using vitamin D for improving respiratory disorders such as bronchitis, chronic obstructive pulmonary disorder (COPD), and asthma. Epidemiological evidence suggests Vitamin D levels in serum are associated with pulmonary function and might also be involved in the remodeling of lung tissues.

This evidence is also better understood based on the pharmacokinetic properties of each of the active ingredients as opposed to only an abstract understanding of the pharmacokinetic properties of the Combination Product as a whole (see section 5.2 ‘Pharmacokinetic properties’).

Clinical safety and efficacy

Administered or used according to the recommended maximum and/or total daily dose is likely safe in adults and children, as the substances are generally well-tolerated. However, insufficient data is available to support safety during pregnancy and lactation. Effectiveness studies on the active substances show plausible therapeutic benefits for patients with the common cold, respiratory tract infections (RTIs), acute bronchitis, upper RTIs, rhinosinusitis, and chronic obstructive pulmonary disease (COPD). However, these active substances are not used to diagnose, treat, cure, or prevent any disease.

It may be unsafe for those with autoimmune diseases or those relying on immunosuppressants. This is also understood based on the contraindications (see section 4.3 ‘Contraindications’).

5.2. Pharmacokinetic properties

There is limited data available on the exact pharmacokinetic properties of Sinulex® Forte Fizzy Tablets.

5.3. Preclinical safety data

Non-clinical data obtained on the use of the active substances reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, and toxicity to reproduction and development. The long-standing and traditional use of the active substances for which studies reveal plausible therapeutic benefits also provides real-world evidence and data. The use of Sinulex® Forte Fizzy Tablets is in accordance with low-risk guidelines.

6. PHARMACEUTICAL PARTICULARS

6.1. List of excipients

Inactive substances per tablet:

- Isomalt ..... 140 mg
- Sodium bicarbonate ..... 80 mg
- Powder lipoxol PEG 6000 ..... 80 mg
- Koltidon CL ..... 80 mg
- Tartaric acid ..... 70 mg
- Povidone K25 ..... 60 mg
- Sucralose / Acesulfame K ..... 10 mg
- Orange Flavoring ..... 10 mg
- Silicone dioxide ..... 5 mg

6.2. Incompatibilities

Not applicable, if used/administered correctly; dissolvable oral pharmaceutical forms.

6.3. Shelf life

Sinulex® Forte Fizzy Tablets has an estimated shelf life of 23 months.

6.4. Special precautions for storage

Protect from direct sunlight or moisture. Do not refrigerate or freeze this product. Store in a cool, dry place at temperatures of 59-77° F, equivalent to 15-25° C, and with ambient humidity between 35% and 65%.

Contents must remain sealed before use, shrink-wrapping, or packing into boxes for transport and storage. For express delivery in smaller batches, the use of specialized containment bins may be used for repacking individual sealed units.

6.5. Nature and contents of the container

Sinulex® Forte Fizzy Tablets come in sealed tubes containing either 10 or 12 tablets per tube. The active substances provide a total of 493.71 mg per tablet. Inactive substances per tablet are provided also (see section 6.1 'List of excipients').

Sinulex® Forte Fizzy Tablets has a tablet dosage form with a specific appearance: Tablet, effervescent, round, pale yellow, 25.5 mm diameter, and no markings. The carton acts as the secondary packaging for storage, also showing the proper labeling.

6.6. Special precautions for disposal and other handling

Return all unused medicine to your pharmacist. Do not dispose of remaining medicines in drains or sewerage systems. Please recycle the empty containers. The expired stock of Sinulex® Forte Fizzy Tablets is to be quarantined in a special holding facility. Upon quarantine, they must be scheduled for destruction and may accumulate to certain holding levels depending on quarantine capacity.

The expired medicines should be destroyed by those duly authorized to carry out or conduct the destruction.

7. HOLDER OF CERTIFICATE OF REGISTRATION

Tara Pharmaceuticals (Pty) Ltd
36 Sovereign Drive, Route 21 Corporate Park, Irene, Gauteng, 0062, South Africa

8. REGISTRATION NUMBER(S)

Item to be completed by SAHPRA or by the Holder of Certificate of Registration once the authorization has been granted.

9. DATE OF FIRST AUTHORIZATION / RENEWAL OF AUTHORIZATION

Not yet assigned.

10. DATE OF REVISION OF TEXT

Not yet assigned.