

CarazolTM

iota-Carrageenan 1.2 mg/mL
(extract of *Chondrus crispus*)

Metered Dose

Nasal Spray

Composition

CarazolTM Nasal Spray: Each metered dose spray delivers iota-Carrageenan 0.06 mg.

Description

CarazolTM Nasal Spray is a unique preparation of Carrageenan which can be used to prevent and treat viral upper respiratory infections, alleviate nasal symptoms of allergic rhinitis and provide relief for dry and irritated nasal mucosa. Carrageenan is a natural carbohydrate (polysaccharide) obtained from edible red seaweeds. The name Carrageenan is derived from the *Chondrus crispus* species of seaweed known as Carrageen Moss or Irish Moss.

Pharmacology

The nose is the most common route of infection for viruses that trigger common cold and flu-like illness. Flu-like illnesses are caused by viruses such as rhinoviruses, coronaviruses influenza virus, adenovirus, enterovirus and respiratory syncytial virus. If viruses have penetrated into the nose, they can attach themselves to the mucous membrane and infect mucosal cells where they multiply and spread. This results in the typical symptoms of a cold, like a blocked or runny nose, sneezing, etc.

CarazolTM Nasal Spray (iota-Carrageenan) forms a protective barrier film against cold viruses. Iota-carrageenan non-specifically envelopes cold viruses and prevents their adhesion to mucous membranes. This Iota-Carrageenan film remains longer on the nasal mucosa and serves as a physical barrier against external influences. Virus particles entering the nasal cavity are blocked by the viscous layer of Carrageenan, consequently they cannot infect mucosal cells. Additionally, newly synthesized virus particles excreted from infected cells are blocked from infecting new cells. This physiological moisture film supports the body's natural defenses against cold viruses. Thereby, the reproduction and spreading of viruses responsible for infecting the airways is reduced.

Low humidity and air pollution can lead to a dry nasal mucous membrane. However, the nose is only able to fulfil its filtering function if the nasal mucous membrane is sufficiently moistened. Due to the high water-binding capacity of Carrageenan, **CarazolTM Nasal Spray** forms soft gels in the presence of water, which leads to a protecting and moisturizing film on mucosal surfaces. This film acts as a barrier

against various external influences such as viruses or allergens and on the other hand, it moisturizes the mucous surfaces, which helps to keep it healthy and resilient to external influences such as dry air.

Indications

CarazolTM Nasal Spray is indicated for -

- Prophylaxis and supportive treatment of viral infections of the upper respiratory tract
- Shortening the duration of flu-like illnesses (e.g., influenza, coronavirus disease, etc.) and alleviate the severity of cold symptoms (e.g., runny nose, sneezing, etc.)
- Relieves from congestion and runny nose
- Prophylaxis and supportive treatment of all complaints resulting from dryness and irritated nasal mucosa

Dosage & Administration

For Adult & Children (≥1 Year):

- For cold and flu-like infection (e.g., nasal congestion, sneezing, runny nose, etc.), spray 1-2 puff(s) 1-4 time(s) per day into each nostril
- For moisturizing dry nasal mucosa, spray few puffs into the nose several times a day depending on individual requirements

Or as directed by the physician.

Side-effects

At present, no other side effects besides very rare cases of hypersensitivity are known.

Contraindications

Do not use if you have a known hypersensitivity to Carrageenan.

Precautions

One spray bottle should be used by the same person only to avoid contamination (spreading germs). If nasal burning, nasal irritation or nausea occurs, discontinue use.

Drug Interactions

There are no known interactions. Studies on interactions with other products were not performed.

Pregnancy and Lactation

CarazolTM Nasal Spray can be used during pregnancy and breast-feeding.

Storage

Keep away from direct sunlight & moisture. Keep below 25 °C temperature in dry place. Keep out of reach of children.

How Supplied

CarazolTM Nasal Spray: Each bottle contains 20 mL uniform solution of Iota-Carrageenan for 320 metered sprays.

Manufactured by

SQUARE PHARMACEUTICALS PLC.

HERBAL DIVISION

BSCIC, Pabna, Bangladesh

www.squarepharma.com.bd

